ISBN: 978-81-910118-7-6

Sinhgad Institutes

Emerging Global Strategies for Indian Industry

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Sinhgad Technical Education Society's
SINHGAD INSTITUTE OF MANAGEMENT
S. No. 44/1, Vadgaon (Bk.), Off Sinhgad Road, Pune - 411 041
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Sinhgad Institutes

ISBN : 978-81-910118-7-6

PROCEEDINGS

Emerging Global Strategies for Indian Industry

On

20th to 22nd February 2014

Sinhgad Technical Education Society's

Sinhgad Institute of Management

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Off Sinhgad Road, Pune - 411 041

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Printed By:
Sinhgad Technical Education Society's
Sinhgad Institute of Management
S. No. 44/1, Vadgaon (Bk), Off Sinhgad Road, Pune – 411 041.
Website: www.sinhgad.edu

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Does Acquiring Talent Require Employer Branding? An Empirical Study

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Abstract:

The human resource is a key resource available to an organization and as such, recruitment and selection of the right candidates to join the organization is a key factor in the success of the organization. One strategy that employers are using these days to attract and retain quality human resource is Employer Banding. Employer branding represents a firm's efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer. Thus employer branding is a new dimension in managing the talent of organization from the perspective of retention and attraction management. Today's young generation brings a brand new set of values to the workplace. The emerging workforce is not just looking for a high salary, or a successful career; young people want more. They want purpose. They want to know why: "Why should I work here, how it fits into what I want with my life". Today's students and recent graduates do not make the same distinction between work and spare time as previous generations did. Their careers are an important part of their identity and consequently an integral part of their life in general. This study tries to focus on the perception of MBA students of a management institute about Employer Branding and the extent to which Employer Branding influence the students to apply for the jobs. This study tries to test the relationships between employer branding and organizational attractiveness.

Key Words: *branding, employer branding, recruitment, talent acquisition, organizational attractiveness*

Introduction:

The concept of branding for products and services is well known. Employer branding may be the least known type of branding yet is becoming more important to organizations. Employer branding has become a very popular concept with HR professionals, branding consultants, and market researchers in the recent past. Employer branding represents a firm's efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer

Branding is what marketers practice to increase the sales of their products or services and has become common knowledge. Employer branding, however, is still a practice that seems to elude most. Ask the average person what it means and they'll probably say they've never heard the term.

A popular brand of customer product expresses certain qualities and images; similarly an employer brand represents the corporate identity to its current and prospective employees, headhunters, and

 ISBN: 978-81-910118-7-6

other stakeholders who get associated with the people side of the corporate. Employer branding is the strategy companies use to appeal to desired current and future ideal talent". In other words, employer branding is to convey to the 'employees that matter', why an employer's workplace is appealing and unique. The purpose is to make it easier for the employer to attract good workers, or even more importantly to get the top talent it needs from the job market

Employer branding is defined as a targeted long-term strategy to manage awareness and perceptions of employees, potential employees and related stakeholders with regards to a particular firm. This includes direct and indirect experiences of dealing with the firm. Like actual product branding, organizations have started to invest employer branding as employees are the internal customers of the firm. The employer brand builds an image confirming the organization as a good place to work.

The "Employer of choice" is an elite status to which most firms aspire. For this designation a firm should offer a value proposition which includes (naming only a few): an excellent work culture and employee communication, opportunity/ advancement, training and above market compensation and benefits and outstanding Graduate opportunities.

The External and Internal factors of Employer Branding:

Employer Brand is built through the culture, personality, and image. Culture broadly represents how it is to work in a company. Personality and image represent the mental image that people have about any organization. For example, Google might represent a youthful, technology driven individual. It may also symbolize freedom, enterprise, and innovation for current or prospective employees. Employer branding has external and internal aspects. The internal factors are the culture, HR practices, and the overall employment experience that a current employee has. The external factors are what a prospective employee feels about the organization. The critical aspect is to have consistency between your internal employer brand and external employer brand.

If what the organization promises to the external world is inconsistent with what is happening in the organization, it can create conflict with the new joinees who expects what was promised through branding. While the current employees on the other hand might feel cheated by the practices followed. Instead of supporting the organization in retaining and attracting talent, it will leave both the current and future employees unhappy. In developing and managing an employer brand, the critical aspect would be the development of "Employer Value Proposition". Employer Value Proposition speaks about the direct and indirect benefits of working with the brand. It also speaks about the core aspects of the association.

Process of Employer Branding:

The employer may adopt different ways to conduct an employer brand scan of its company. A basic process of carrying out an employer branding scan involves the following steps.

Research:

To understand where an employer is positioned within the employment market and to see the appropriate action plan is prime. The four vital factors, each internally and externally, are:

- Know how the target audience perceives the employer
- Learn what the target audience desires and wishes from the employer
- Discover where the employer is positioned in relation to its competition
- make sure that the research is updated often

Employer Value Proposition:

The company or organization has to have a unique employer offer. The EVP offers current associated and future workers a reason to work for an employer and reflects the company's competitive advantage. Employers that manage their EVP effectively enjoy a rise in their talent pool and employee engagement, as well as a potential decrease in salary costs. Typically, less enticing employers have to be compelled to pay a wage premium to urge high talent whereas attractive employers do not. By analyzing the factors influencing the employer brand, and by shaping a powerful and true EVP, the employer are going to be ready to deliver sound and consistent communications during the communication phase and develop an attractive, as well as distinctive, employer brand.

Communication strategy:

The development of a communication strategy is always based on the findings of the research from the first step and a distinct EVP. The EVP is a useful tool used by HR, Marketing to communicate and to emphasize the most attractive factors of the employer. Once an employer knows who they need to speak to and what to talk, the employer then has to select the most efficient and effective channels for reaching the current and the prospective employees. Selecting the right channels and understanding how best to target various groups is also based on research.

Communication Solutions:

The aim at this step is to express the employer value proposition (EVP) by using the correct words and pictures, so it becomes consistent with the corporate identity and branding efforts. The communication material ought to have the same look and feel regardless of communication channel. Since organizations use many alternative channels, its important that the target groups recognize the organization and relate to the employer offer, no matter if they are being reached via the company web site, reading a commercial in the newspaper or taking part in an event. Employers strive attempt to develop consistency throughout their communication material.

Evaluation:

Implementing all the steps and monitoring closely what works needs to be identified on the way to the final stage. It is of great importance at this time that the organisation sets targets on what they need to attain with the planned activities in a clear and measurable way. The evaluation part involves measuring the impact of the employer branding program

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Above all the success of any employer branding program depends on the efficiency with which the need, situation for designing, implementing and monitoring an employer brand program has been created. Not solely a good understanding between the need, process, and inputs are needed however the complete utility comes when full workforce is benefited

Employer Branding as a powerful recruitment tool:

The human resource is a key resource available to an organisation and as such, recruitment and selection of the right candidates to join the organisation is a key f actor in the success of the organisation. All possible strategies should therefore be applied to ensure that the organisation attracts recruits and retains quality human resource. One strategy that employers can use is effective branding. Employer branding has become a crucial element of organizational strategy, at a time when talent acquisition and retention have become essential ingredients of business performance.

The ability to attract and retain the best talent in the market is key for any organisation, but never more so than in highly competitive sectors where niche skill sets are in high demand. Attracting new talent is the first stage of any recruitment process and whilst it is widely recognized that in order to attract applicants organizations need to promote the strongest attributes of the organisation, what many fail to recognize is that they may be fighting a losing battle if the pre-existing perceptions held by employees aren't addressed.

Consider every encounter a job seeker may have had with your organisation – these previous encounters will have already created an impression of your brand and could potentially determine whether they decide to even apply for a role or not. It is also highly likely a potential applicant will research your company, whether looking at the careers section of your website or tapping into the experiences of others on social networking sites, so it's crucial the information you provide, or the experiences of others, support your core messages.

By understanding existing perceptions and the people you are trying to attract you can also create a more compelling case for you as an employer. For example, focusing on more than just technical requirements in job specifications and considering why a role would be attractive, what your organisation can offer (culture/work life balance/ benefits etc) and what would make you more appealing than other companies or opportunities goes a long way to developing a strong employer brand. Similarly check the careers section of your website reflects the brand to its full potential.

A strong brand can be a company's most valuable asset, increasing customer loyalty or acting as a differentiator in a crowded market place. An employer brand can be used for similar effects, lowering turnover due to higher employee loyalty and helping employers stick out in the increasingly competitive job market. Research has shown that early stages of recruitment activity (sponsorship, word of mouth endorsement and advertising) can have an important influence on the perception a job seeker has

towards an employer. If these fit what the candidate is looking for in an employer, his likeliness to apply to this particular company increases. The higher the fit between the values of one company to those of the job seeker, the more likely the candidate is to be attracted to this employer

The benefits of a strong employer brand

Today's young generation brings a band new set of values to the workplace. The emerging workforce is not just looking for a high salary, or a successful career; young people want more. They want purpose. They want to know why: "Why should I work here, how it fits into what I want with my life and why does this company do what it does?" Today's students and recent graduates do not make the same distinction between work and spare time as previous generations did. Their careers are an important part of their identity and consequently an integral part of their life in general. In a recent global Universum study on career personalities, 85 percent of those surveyed said that their work is part of who they are, not just a way of making money

A clear and defined employer brand can offer significant benefits to your organisation. It can significantly improve application rates and put your company in the enviable position of having a wide pool of talent to choose from. In tight recruitment markets, where competition for the best talent is fierce, it can also help keep the organisation top of mind, make your company stand out in a crowded market and provide compelling reasons to join your company rather than going elsewhere.

In companies where values, personality and desired behaviours have been deeply embedded across the organisation employers are also likely to benefit from increased engagement from employees. Greater employee engagement and motivation has been shown to result in greater productivity and higher retention rates – all of which contribute to retaining skills and knowledge, and ultimately improving your bottom line. Increased engagement with the brand will also help build employee loyalty reducing the risk of losing your best people to competitors, and therefore avoiding the financial implications of recruiting and on-boarding their replacements.

With such significant benefits associated to creating a compelling employer brand it comes as no surprise that research from the EBI has shown that despite the economic downturn and unstable recruitment market, over a third of all businesses plan to increase their spend on developing their employer brand in the next 12 months.

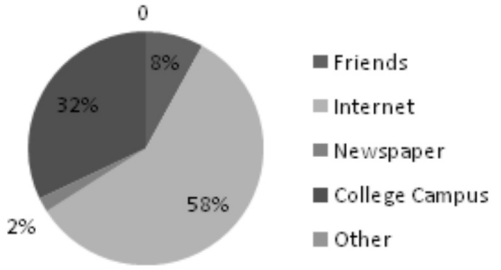
Data Analysis and Interpretation:

Q1: Where Do you search information about new job opportunities?

Table 1

Options	No. of Respondents	Percentage of Respondents
Friends	4	8
Internet	29	58
Newspaper	1	2
College Campus	16	32
Other	0	0
Total	50	100

 ISBN: 978-81-910118-7-6



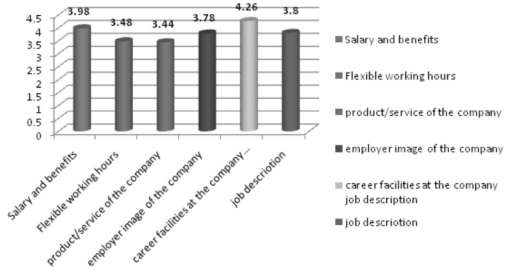
Graph 1

Interpretation: From the above graph it is inferred that 29 students out of 50 search information about new job from the internet.

Q2: How important are the following job qualities to you?

Table 2

Options	Mean Value
Salary and benefits	3.98
Flexible working hours	3.48
product/service of the company	3.44
employer image of the company	3.78
Career facilities at the company job description	4.26
Job description	3.8



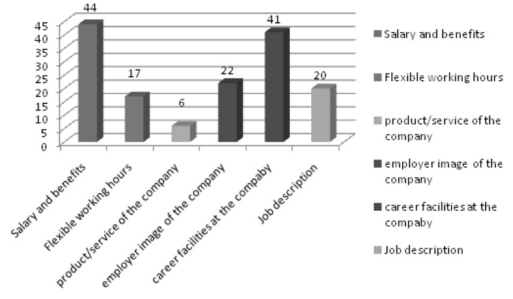
Graph 2

Interpretations: From the above graph it can be inferred that Career facilities is one of the most important factor for final year students of management followed by salary and benefits. It can also be noted that the employer image of the company also matters to the students for applying to a company as it scored a mean of 3.78 on a 5 point rating scale.

Choose three most important job qualities

Table 3

Options	No. of Respondents
Salary and benefits	44
Flexible working hours	17
product/service of the company	6
employer image of the company	22
career facilities at the company	41
Job description	20



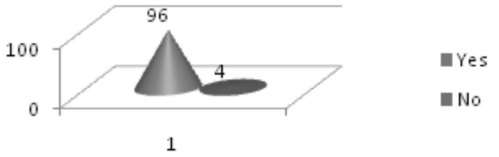
Graph 3

Interpretation: for 44 students out of 50, salary and benefits is important. 41 students chose career facilities as one of the three most important job qualities.

Q3: When evaluating whether to apply for a job with a company, do you visit the corporate Website?

Table 4

	No. Of Respondents	Percentage of respondents
Yes	48	96
No	2	4



Graph 4

Interpretation: From the above graph it is clear that almost all the students visit the company's website before applying for the job.

Rate the following parameters on a 5 point rating scale

Table 5

Sr. No.	Parameters	Mean
1	Good Relationship with colleague	3.92
2	Good Relationship with supervisor	4.18
3	organization that increases my self confidence	4.22
4	A fun Working environment	3.5
5	Organisation that values and use my creativity	4.02
6	A happy working environment	4.1
7	High Quality Goods or services	3.98
8	An attractive overall compensation package	4.02
9	An above average basic salary	4.16
10	working in an exciting environment	3.7
11	Feeling good about yourself as a result of working for the organization	4.26
12	organization in which I would be accepted	3.84
13	innovative employer with novel work practices and forward thinking	3.92
14	Gaining a career enhancing experience	4.34
15	good promotion opportunities within the organization	4.16
16	organization that would provide me with job security	4.18
17	A springboard for future employment	3.9
18	opportunity to teach others what I have learnt	3.6
19	opportunity to apply what I learnt at college	3.76
20	working for humanitarian organization that gives back to society	3.94

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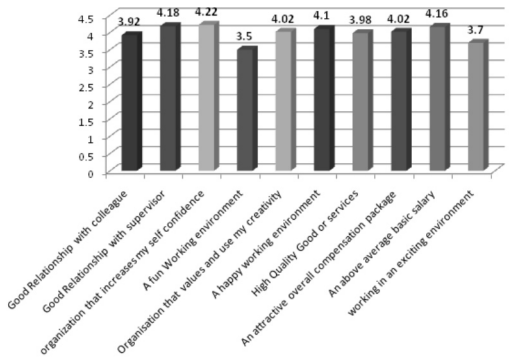
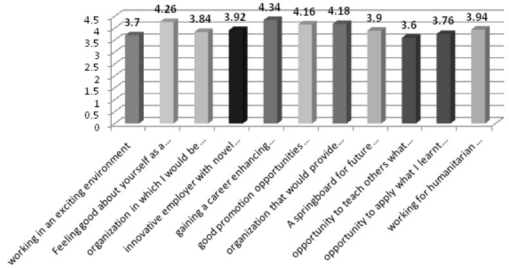


Graph 5.1



Graph 5.2

Interpretation: From the above graph it can be interpreted that career enhancing opportunities is the most important parameter for the students to apply for the job. It can also be inferred that there are many parameters other than salary and benefits that are important to students to apply for a job to a company.

Findings:

- Internet is the most popular source for searching new jobs
- All the students visit the company's website atleast once before applying for the job
- Salary and benefits is not the sole criteria for students to apply for a job to a company
- Along with salary and benefits career opportunities is a parameter that motivates student's intention to apply for a particular company
- Job security, CSR, good relations with colleagues and supervisors, etc is also important criteria for students to apply to a company.

Conclusion:

To be competitive in today's market and prepare for future growth, organizations must sell themselves while attracting the right candidates. Employer Branding helps for better talent management, for acquiring the right fit, and also for staying ahead of its competitors. Finally, it creates immense and extensive bonding with stakeholders, employers and forthcoming employees in the market

From the research it can be concluded that employer branding plays a major role in influencing the prospective candidates to apply for a firm and there is a definite relationship between employer branding and student's intention to apply.

By carefully selecting attributes of employer brand, and aligning employer brand with corporate strategy,

Employer brand can be a powerful tool for organizations to address diverse challenges. It contributes to the alignment of external and internal value perceptions on the organization, improves workforce strength, and brings various economic benefits for the employer. As different components of employer have varied impact on factors of organizational performance,

organizations need to articulate the desired outcomes so to tailor their employer brands to achieve effectiveness and efficiency.

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Green Human Resource Management [HRM] Initiatives: A Case Study of Gujarat Alkalis and Chemicals Limited (GACL), Vadodara

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Abstract:

Green HRM - The term 'green HR' is most often used to refer to the contribution of people management policies and practices towards the broader corporate environmental agenda. The main objective of this concept is to raise employee awareness of environmental issues and open a dialogue focused on sustainability and Environmental stewardship, Change employee behaviors to be more green in daily actions at work and at home Promote your environmental commitment to key external audiences in other words, reduce your company's carbon footprint and operating costs through a concerted employee effort. This research paper, researchers have attempted to study on Green HR initiatives by taking case study approach through selected Employee of Gujarat Alkalies & Chemicals Limited Situated at Baroda.

Key Words: *Green HR', Employee awareness, Environmental issues, Carbon Footprint*

Introduction:

Green HR can be defined as environmentally-friendly HR initiatives resulting in greater efficiencies, lower costs and better employee engagement. HR plays a key role as HR creates awareness amongst employees and builds engagement, which in turn, helps organization to operate in an environmentally-sustainable fashion. The main objective of this concept is to raise employee awareness of environmental issues and open a dialogue focused on sustainability and Environmental stewardship, Change employee behaviors to be more green in daily actions at work and at home Promote your environmental commitment to key external audiences, Reduce your company's carbon footprint and operating costs through a concerted employee effort Establish local-office green champions to influence behavior, focus on local green issues, and support community/social efforts, Position your program as a compelling recruiting tool. [www.buckconsultants.com] With society becoming more environmentally conscious business are starting to incorporate Green initiatives into their everyday work environment. There is growing need for integration of environment management into human resource management – "Green Human Resource Management". After a wealth of research into Green marketing (Peattie, 1992), Accounting (Owen, 1992), and management (McDonagh and Prothero, 1997). It is time to It is time to throw a green light to Human Resource Management-Green HRM. The term 'green HR' is most often used to refer to the contribution of

 ISBN: 978-81-910118-7-6

people management policies and practices towards the broader corporate environmental agenda. Typical green activities include video recruiting, or the use of online and video interviews, to minimize travel requirements. Green rewards can include the use of workplace and lifestyle benefits, ranging from carbon credit offsets to free bicycles, to engage people in the green agenda, while continuing to recognize their contribution. .In this research paper, researchers have attempted to study on Green HR initiatives by taking case study approach through selected Employee of Gujarat Alkalies & Chemicals Limited Situated at Baroda . It has also offered the results, findings and implications derived from evaluation of selected Employees' Expectations Vis-À-Vis Attitude concerning Green HR practices.

Need of Environmental Awareness:

Exponential growth of human population coupled with ways to attain high standards of living through technological advancement has resulted in widespread contamination of the environment at the global level. During the past few decades rapid industrialization, wanton exploitation of natural resources and excessive use of environmentally abhorrent materials have resulted in discernible environment disruptions threatening the life support system. Such change may jeopardize the very existence of life on this planet which evolved our millions of years. During these years millions of species of microorganisms, plants & animals co-evolved, the most intelligent of them being the human being, who eventually become the master of all other species & started exploiting them. Human centric approach of development has already damaged the nature to a large extent. This has caught attention of scientists, academicians, Social Scientist, Policy makers & the like necessitating discussion at various international and national floras. The objectives of Environment Protection cannot be achieved without involvement of the masses at the grass root level. To make the citizen environment conscious, the Supreme Court of India has given directive to make all curricula Environment Oriented. [By-Anubha Kaushik & C.P.Kaushik {2008}]

This requires the incorporation of environmental dimensions into the process of development. It is important to make choices and decisions that will eventually promote sound development by understanding the environment functions. The United Nations Conference on Environment and Development (UNCED) in its Agenda 21, Chapter 18: Protection of the Quality and Supply of Freshwater, underscored the importance of environmental protection and conservation of the natural resource base in the context of water resources development for agriculture and rural development.[http://www.fao.org/docrep/V8350E/v8350e01.htm]

Sustainable Development:

Norwegian Prime minister, G.H.Brundtland, who was also the Director of World health Organization (WHO) defined Sustainable Development as meeting the needs of present without compromising the ability of future generation to meet their own needs.

"Development should be visualized in a holistic manner, where it brings benefits to all, not only for present generation but also for the future generations.

Indian context:

India has still to go long way in implementing the concept of sustainable development. We have to lay emphasis on framing a well planed strategy for our developmental activity while increasing our economic growth. We have tremendous natural diversity as well as huge population which make planning for sustainable growth all the more important and complex. The national council of environmental Planning and Coordination (NCPC) set up in1972 was the focal agency in this regard. The Ministry of environment & Forest set up in 1985 has formulated guidelines for various developmental activities keeping in view the sustainability principles. [By-Anubha kaushik & C.P Kaushik{2008}]

Review of Literature:

Concept of Green HR as per the Dr. Douglas Renwick:

"Dr. Douglas Renwick and his team from University of Sheffield Management School had introduced a very essential and cognitive Research paper series on "Green HR" in April 2008. This research paper takes a new and integrated view of the literature in Green HRM, using it to classify the literature on the basis of entry-to-exit processes in HRM (from recruitment to exit), revealing the role that HR processes play in translating Green HR policy into practice. The contribution of this research paper lies in drawing together the extant literature in this area, mapping the terrain in this field, and in proposing a new process model and research agenda in Green HRM. [Dr.Douglas Renwick in April 2008 -Discussion Paper Series on Green HR No 2008.01(www.sheffield.ac.uk/content/1/c6/08/70/89/2008-01.pdf)

Developing green HR strategies:

Jon Ingham talks about "Green HR" in his article "Developing green HR strategies" in April 2010.He defined "green HR in very innovative way. He states about Green Economy-One in which consumer and employee expectation and future environment change will require business to address Green issues.

This article also include building the green business, how to create a green brand which gives new era in this agenda. In terms of the corporate brand, this is not just about making the existing business more green but finding more green ways to do business. He has expanded Green issues with the help of those companies who had already adopted Green Programs like Green Recruitment & selection, Green Training, Green Performance Management, Green Job description Green teams, Green organization culture etc. He had also construct the three phase- Evaluate, Elimination, Illuminate for any company which is desire to being Green Company. Impact of Green HR on Business & HR:-(1) Low cost (2) Better Power Utility (3) Low cost Gaining Reputation (4) Perception & Goodwill(5)Smarter Performance which translate into cheaper products (6)It's economically useful has

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directed impact on Profit & Enhances return on Investments.[Jon Ingham in April 2010 -"Developing green HR strategies"](www.scribd.com/doc/61220598/Green-HRm.com)

Green Work-Life Balance:

A New Perspective for Green Human Resource Management," introduces the idea that the greening of HRM can reach its full potential only by considering employees in their two main analytical dimensions: at work as employees, and at home as consumers. The article's main assumption is that a more environmentally friendly society cannot be achieved if the emphasis is only on the adoption of green behavior in the workplace. Instead this has to be combined with fostering green behavior in an employee's private life. The authors present a framework to explain how work-life balance could promote a more environmentally friendly society, facilitating environmentally friendly behavior in both domains. Among the benefits of this approach are improved employee motivation, commitment and job retention. Thus, green work-life balance could be relevant for both companies and employees. Furthermore, the article shows how the work and private life dimensions could interact to promote a broader and systemic greening of HRM. The success of a green work-life balance strategy depends on how organizations can motivate employees to be green consumers outside companies and how they will be able to motivate employees to bring green ideas, experiences and innovations to the work place. This article breaks new ground by putting together the dimensions of "work" and "private life" to analyze the greening of companies and the greening of HRM.

The conceptual arguments presented by the authors should be empirically tested in future research.[Viola Muster and Ulf Schrader "Green Work-Life Balance](http://www.hampp-ejournals.de/hampp-verlag services/get?file=/frei/ZfP_2_2011_Muster)

Basic terms of the proposed Research Study:

Eco- Friendly Environment:

- **Eco-Friendly Term:** Environmentally friendly (also eco-friendly, nature friendly, and green) are terms used to refer to goods and services, laws, guidelines and policies claimed to inflict minimal or no harm on the environment. Companies sometimes use these terms to promote goods and services by making environmental marketing claims and with eco-labels. (www.wickiepedia.com)
- **Environmentally Friendly Business principles:** Nowadays the biggest challenge to business management is ensuring profitability along with opting environmental friendly methods. Today's business leaders should not think of making money without thinking of the after effects of their business practices. Many companies have already proven that it is entirely possible to ensure healthy profits while choosing greener practices.

Definition of Green HRM:

Across the globe, we are moving from an industrial-based financial system to a talent based economy. We are also entering in a Green Economy-One in which consumer & employee expectations and future environmental change will require businesses to address "green" issues. Environmentally conscious organizations will become increasingly prominent as we re-enter into period of growth. While CO2 growth may have stabilized during the recession, it is destined to increase again as businesses increase production and other business activities. In addition, during the recession, the main environmental focus of many businesses was placed on reducing waste and optimizing resources. A renewed focus on growth provides unique opportunities for business to become green by looking at ways to create new Environmental DNA while producing operational saving by reducing their carbon footprint.[By-Jon Ingham, April 2010]

Definition of Green HR:

"Green HR can be defined as environmentally-friendly HR initiatives resulting in greater efficiencies, lower costs and better employee engagement. HR plays a key role as HR creates awareness amongst employees and builds engagement, which in turn, helps organization to operate in an environmentally-sustainable fashion."[By-Anjana Nath, regional head - HR, Fortis Healthcare Ltd.]

Research Methodology:

An attempt has been made in this research study to offer results, findings and its implications collected through using structured-non disguised questionnaire. A Questionnaire was prepared for the purpose of getting feedback from the employees and manager regarding GREEN HR at GACL, Vadodara. 50 Employees are selected from different Department and were distributed the questionnaire from the purpose of the study. This pilot research study based on Exploratory & Descriptive research design offers report on selected Employees' responses on Green HR Benefits on various kinds of Green HR Activities and feedback of being Green HR initiatives.

The researchers have undertaken reliability and validity of the structured questionnaire. The researcher proposes to adopt Non Probability approach for conducting the research. The researcher proposes to adopt Convenience Survey (non-probability) as the sampling method for conducting the research study. The sampling media in this research study would be Personal interviewing (A structured Personal Interviews) of selected respondents on criteria concerning Green HR in Gujarat Alkalies and Chemicals Limited (GACL).

The data is represented graphically in percentage. The percentages of the employee opinion are analyzed and express in the form of charts and have been placed Majority of the respondents were found as placed between categories of Strongly Agree and Strongly Disagree.

Data Analysis & Results of the Research Study:

The researchers have offered profile of the Employee. The survey results are

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presented and analyzed in tabular and graphical form following the sequence as it appeared in the questionnaire. A researcher has used Percentage Method for better DATA ANALYSATION.

The results of the data analysis showed that Most of the respondents (30 percent) indicated that they were between 35 to 44 years of age.Majority of the respondents 56 percent indicated that their highest level of Education is Graduation. The highest Respondents (50 percent) are Managers or officer of different Department of GACL, Vadodara. In the case of eco-Friendly Term Majority of Respondents (90 percent) indicated that they know Eco-Friendly Environment, 78percent of Respondents are aware of Eco-Friendly Organization at GACL, Vadodara,

Most of the Employees (42percent) think that they have A Green HR in GACL. Some 34 percent of them feel they don't have and their company should accept it.. Majority of Respondents (58 percent) feel that Green Corporate Building Certificate should be obtained by their company. Majority of Respondents feels that Green HR Benefits which stated are really beneficial to their Organization:-(Note, Here Percentage of respondents are include sum of Two opinion i.e. strongly Agree & Agree) Use & Application of Green HR results into Cost Saving of Electricity (84percent), Adoption of Green HR reduces requirement of Paper (84percent). Application of Green HR preventing wastage of water (84percent). Adoption of Green HR helps Management for Waste Disposal (80percent). Use of Green HR reduces Fuel consumption. (76percent), Application of Green HR is helpful in Creation of Community Goodwill (66percent). Majority of respondents are agree with this Green Activities:- Our organization should move fast towards a paperless office concept.50percent. Our organization should adopt Automation 58percent. Organization should hold a seminar themed on Green HR initiatives. 54percent Our Organization should install "Light sensors" to save energy.50percent Our organization should give Online Advertisement.52percent Our organization should conduct Training Programs on Waste Management 52percent Very few Respondents are agree with this activities: Our organization should follow Green Recruitment procedure38percent, Our organization should conduct Video Interviews28percent. Majority of Respondents are Agree (54percent) with the planting Tree twice in year. Close to it (30percent) of the Respondents are strongly agreed with it. Approximately 84percent of Respondents have feeling that they should switch off the system during recess time. One can assume that because the data shows that 44percent are Agree and 40percent are strongly agree with this routine activities Maximum number of (46percent) Respondents are strongly agreed with maximize use of natural day light. Some of them (36percent) are agree with it.

While few of them (10 percent) are disagree with it. Majority of Respondents (72 percent) feel that their organization should switch to use of the compact & fluorescent light bulbs, LED & other energy saving products. Whereas (20 percent) are Respondents are disagree with it. Maximum

numbers (42percent) of Respondents are agreeing with decreasing printing at workplace. Some of them (22 percent) are strongly agree with it. While few of them (18 percent) are disagree with it. Whereas 44 percent of respondents feel that they should use disposable paper. Along with it 18 percent of Respondents are strongly agree with it. Majority of Respondents (70 percent) are agree or strongly agree for it (organization should make efforts to reduce the use of Plastics-Water Bottle; Pouch etc) However (24 percent) are Respondents are not shown their view on it. Majority of Respondents (94 percent) of Respondents feels that their organization should provide transportation facility for Employee. Maximum (86 percent) Respondents are agreeing with Car-pooling activities. It is good sign for Organization.66 percent of respondents feel that there should be vermin-composition of food waste while 22 percent of Respondents do not want to give their view on it.52 percent of respondents are in favor of Greening activities they are agree with it. Along with it 24percent of Respondents are strongly agree for Greening Activities. Approximately 44 percent of respondents are agreed with this statement "Our organization should make employees to think in Greener Way" Thus, we can conclude that Green HR is not a single Hand concept but we all should come forward for SAVE OUR MOTHER EARTH, TO SAVE OUR ENVIRONMENT…..

Findings:

As we know that "Human" is the Heart of Any Organization. Most Valuable assets of any organization are its people. So, when we talk about Green World, Green Organization Human Resource cannot be except from it. Green HR is one of the important tools introduced by Human resource Experts to protect the worlds Environment. As we know that Green HR still emerging concept in Human Resource Management. The Project throws Green Light to HRM by its Exploratory study on Green HR Initiatives in Gujarat Alkalies Chemical Limited, Vadodara.

By this research work A researcher could found that the presences of Middle Age Employee are higher than other Age group at GACL, Vadodara along with it a researcher had also observed that majority of respondents are male and married.

A researcher had also observed that there is adequate distribution of man power into Top Management, Middle Level Management and Bottom level Employee at different Department in GACL Vadodara. As per the Experience chart a researcher can conclude that GACL has strong and Loyal Human Resource. This may be one of the most efficient competencies of GACL, Vadodara. The researcher has calculated respondents view on Green HR Concept. Researcher has place different criteria regarding Green HR Activities, Green HR Benefits, Green HR Behavior etc. in the research instrument and She has found that majority of respondents are Strongly Agree or Agree with this emerging Concept of Green HR. They would love to accept it as a part of routine life. But on the other hand they had some ambiguity about this concept.

- Hypothesis: 01There is no association between selected background variable vis Selected Respondents awareness

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about Existence of Eco-Friendly Environment vis a vis their Age.

- Hypothesis: 02 There is an association between Age of selected Respondents vis a vis their average opinion on implementation of Green HR
- Hypothesis: 03 The Experience of Selected Respondents are his or her attitude towards implementation of Green HR is dependent

Implications:

The Greening of HR survey examines the environmentally friendly "GREEN" Initiatives that Organization should develop and utilizing it to protect the Environment more consciously.

By the DEMOGRAPHIC PRESENTATION a researcher could find that, The presences of Middle Age Employee (35-44) are higher than other Age group at GACL, Vadodara along with it a researcher had also observed that majority of respondents are male and married. By analyzing the highest qualification level attained by respondents, the level of formal education of the Officers could be assessed. With reference to the above mentioned information one may assume that the company's minimum education qualification for Assistant Officer is Graduation. It would therefore be necessary to determine that this level of qualification, coupled with the experience of the Officer, are sufficient to serve the recruitment and selection needs of the organization .

By the PRESENTATION REGARDING AWARENESS ABOUT ECO-FRIENDLY TERMS: A researcher could find that Majority of respondents have Awareness regarding the Eco- Friendly Terms. So, it is good sign for organization. But somehow researcher could also observe that some of them are really keen to get more knowledge relating to it. So, for it Organization should install training programs which will incur knowledge of Eco- Friendly Environment among the Employee. By the PRESENTATION REGARDING GREEN INITIATIVE ACTIVITIES: Particularly in this part a researcher could find that The GACL has already taken its first step towards Green Era.

By these following activities that, GACL mission statement includes Eco-friendly Term, It has a separate committee for Corporate Social responsibility. They had 5's Concept and at the last the Most important they had already adopted Green Technology. But particularly At the Question on Green HR Majority of employee has ambiguity for this concept. But If Knowledge of Green HR is provided in respected manner than they might become Bench mark in particular this field. By the PRESENTATION REGARDING GREEN BENEFITS:-While analyzing this part of project a researcher had observed that majority of Employee are agree with Green Benefits and they fill that they should apply it by seeing its benefit but they are not sure about the result that they fill that "Green HR should be Quality of Action and not the quantity of waste." So, for it an Organization should make presentation of Well-known and successfully running GREEN COMPANIES like BANK OF AMERICA, GENERAL ELECTRIC, McDonalds, WALLMART, HONDA, HP etc. By the PRESENTATION

REGARDING GREEN ACTIVITIES:-Especially for this part a researcher could find that majority of respondents are agree with this Greening Activities some of them are already doing some of this activities. So, it is really nice thing for organization but along with it they have ambiguity for the Green HR concept. So for it Organization should install the tanning program for it. So Employee gets proper knowledge about it and as a result an organization gets Green benefits like cost saving, less fuel consumption etc. But along with it they are disagree with Green Recruitment and Video Interviews. Never the less they are agree with majority of Green Activities So, an organization should adopted that activities and they should gradually deal with this two activities by providing proper knowledge and by explaining its benefits.

By the PRESENTATION REGARDING GREEN BEHAVIOUR:- A researcher could find that majority of respondents are agree with it along with it they feels that they had already adopted some of Green Behavior by carpooling activities, Vermicomposition of food waste etc. But on the other hand some of them are not want to express their view or disagreed with the activities like Decreasing printing, circulation of News paper etc. So, for it organization should convey them by explaining benefits of it. So, by all these presentation a researcher could found that GACL is in proper position for application of GREEN HR today. Because Majority of respondents are happy with this concept and they really want to have a concept like it. So, it is now in the hand of Organization. But A researcher could filled that many concept of Green HR is already Exist in GACL but it is in an ambiguity way.

So, Green HR could be applicable in GACL by proper way- By providing Proper training of Employee for it, by giving proper knowledge of it, by synchronizing all green efforts in structured manner.

Conclusion:

"Future of our planet lies in our hands"

Whenever we heard word "Environment" what we think!!! Mountain, river, and most of us had a picture of Green Trees, Gardens (Greenery) in our mind. And by it may be most of us gets a peaceful smile in our face. But do you really think this smile will be come at our Future Generation Face!!! May be "NOT" due to our So-called Efforts which are hurting our Mother Earth so much….So, Readers it is time to do something for our Mother Earth, To protect our Environment, To save our Future Generation. We all are Environment Lover We all want our Environment safe from bottom of our heart because we love our future. So may be for that "To protect our Environment is become important Global Issue for whole world. The whole world is putting their step to protect our precious Environment. So, GREEN HR is a small but important step taken by HR Experts to protect small part of Worlds Environment by the instrument of Green HR. Green HR is not one concept of HR but it is living Engine which pulls Environmental awareness in Human Resource Management..Whenever we think about Green HR we always think that to Greening our staff but in reality Green

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HR is very wide Subject. As Jon Ingham's words that, "It is not just about making the existing Business more Green but findings more Green ways to do business." As a Researcher I had try my level best to get maximum knowledge regarding Green HR but still I feel that I could touch very small part of it.

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Appendix

Findings from Hypothesis Test:

Hypothesis:01

H0: There is no association between selected background variable vis Selected Respondents awareness about Existence of Eco-Friendly Environment vis a vis their Age.

H1: There is an association between selected background variable vis Selected Respondents awareness about Existence of Eco-Friendly Environment vis a vis their Age.

Test of Hypothesis between Age and Level of Awareness about Eco-friendly Environment in GACL, Vadodara.

Age / Levelof Awareness	18-24	25-34	35-44	45-54	55-64	TOTAL
Aware	04	30	28	18	30	110
Not Aware	02	03	07	06	12	30
TOTAL	06	33	35	24	42	140

[X2= (O-E) 2/E, Degree of Freedom = (r-1) (c-1), Level of Significance = 05percent]

S.N.	Selected Criteria	X2-Value
01	There is no association between selected background variable vis Selected Respondents awareness about Existence of Eco-Friendly Environment vis a vis their Age.	7.692

At 4 Degree of Freedom & 5percent level of Significance Table Value is 9.49

Therefore, Computed Value < Table Value, 7.692 < 9.49.

Therefore, H0-Null Hypothesis is accepted.

IMPLICATIONS:

Thus, There is no association between selected background variable vis Selected Respondents awareness about Existence of Eco-Friendly Environment vis a vis their Age. The Researcher has attempted it to test relationship between Age and Level of Awareness about Eco-Friendly Environment of the selected Employee at GACL. For which the result was Insignificant. Hence Null Hypothesis is accepted. "Thus the researcher has observed that Age Group is not bias for awareness of Eco-Friendly Environment.

Hypothesis:02

H0: There is no association between Age of selected Respondents vis a vis their average opinion on implementation of Green HR

H1: There is an association between Age of selected Respondents vis a vis their average opinion on implementation of Green HR

Test of Hypothesis between Age and opinion towards implementation of Green HR in GACL, Vadodara.

Distribution as per Age / Opinion towards Green activities	18-24	25-34	35-44	45-54	55-64	TOTAL
Strongly Disagree	04	22	26	18	10	80
Disagree	12	15	90	39	39	195
Cannot Say	27	72	96	70	85	350
Agree	35	196	233	128	350	942
Strongly Agree	06	157	185	81	104	533
TOTAL	84	462	630	336	588	2100

[X2= (O-E) 2/E, Degree of Freedom = (r-1) (c-1), Level of Significance = 05percent]

Sr.No.	Selected Criteria	X2- Value
01	There is no association between Age of selected Respondents vis a vis their average opinion on implementation of Green HR	156.05

At 16 Degree of Freedom & 5percent level of Significance Table Value is 26.3

Therefore, Computed Value >Table Value i.e. 156.05>26.3

Therefore, H0-Null Hypothesis is rejected.

IMPLICATIONS:

Thus, there is an association between Age of selected Respondents vis a vis their average opinion on implementation of Green HR. The Researcher has attempted it to test association between Age Group of Employee and the Average opinion of the selected Employee at GACL towards Green Activities.

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For which the result was Significant. Hence Null Hypothesis is rejected. Thus the researcher could found that the age group is really one of the affecting factors for the opinion of Employee for implementation of Green Activities.

Hypothesis: 03

H0: The Experience of Selected Respondents are his or her attitude towards implementation of Green HR is independent.

H1: The Experience of Selected Respondents are his or her attitude towards implementation of Green HR is dependent

Test of Hypothesis between Experience and Attitude towards implementation of Green HR in Organization.

Experience / Implementation of Green HR	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	TOTAL
Strongly Agree	27	23	12	37	18	05	28	05	155
Agree	118	61	20	29	29	53	103	03	416
Cannot say	36	12	15	19	13	05	37	01	138
Disagree	07	00	17	17	01	01	19	05	67
Strongly Disagree	04	00	00	10	03	00	05	02	24
TOTAL	192	96	64	112	64	64	192	16	800

[X2= (O-E) 2/E, Degree of Freedom = (r-1) (c-1), Level of Significance = 05percent]

Sr. No.	Selected Criteria	X2- Value
01	The Experience of Selected Respondents are his or her attitude towards implementation of Green HR is independent.	162.8196

At 28 Degree of Freedom & 5percent level of Significance Table Value is 41.3

Therefore, Computed Value >Table Value i.e. 162.8196>41.3

Therefore, H0-Null Hypothesis is rejected.

IMPLICATIONS:

Thus, The Experience of Selected Respondents are his or her attitude towards implementation of Green HR is dependent. The Researcher has attempted to test the Experience of Selected Respondents are his or her attitude towards implementation of Green HR is independent For which the result was found that it is dependable. Hence Null Hypothesis is rejected. The Experience of Employees are play important role towards implementation of Green HR in Organization along with it attitude is dependent to Experience of selected respondents also.

A Study of Organizational Communication Practices and their role in Organizational Development – With Special Reference to IT Industry in Pune. – Pilot Study

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Abstract:

Communication in an organization is inevitable. Internal communication plays a major role in organization development. This is a pilot study conducted for the purpose of testing reliability and validity data analysis tools, especially the questionnaire, and to know the same set of questions elicit same type of responses.

Key Words: *Organizational Communication, Organization Development, Reliability, Validity, Crronbach's alpha, Guttman Split-Half Coefficient, Spearman-Brown Coefficient*

Introduction:

Communication plays an essential role in an organization. It can also termed as life wire of the communication. Communication is very crucial and unavoidable whether it is for individuals or in an organization as our intentions can pass to others only through communication.

When talking about organizational communication – communication in an organization is inevitable. Employees, different departments communicate from time to time in respect to daily activities and the organization's relationship with the external world. It could be hierarchical, that is, from top to bottom or vice versa. It could be formal or informal; vertical, horizontal or diagonal. Whichever means, modes or types of communication, what matters is that communication takes place.In fact, communication within an organization could be grapevine or rumour. In all, communication in an organization is very complex and it needs to be correctly handled and monitored to avoid chaos, crisis or conflict.

Internal communication plays a major role in organization development. The importance of effective communication during organizational change is becoming more and clearer. The reasons for change have to be clear to the people involved, and they must have a vision of the direction or goals of the change in order to know where they need to go. Managers and change agents are usually seen as the ones who have to explain why change is needed and which improvements are intended. Communication is often discussed as a factor that determines the attitude towards change. For example, Armenakis, Harris, and Mossholder (1993) argue that

 ISBN: 978-81-910118-7-6

readiness for change can be created through effective communication of the message for change.

Recent research indicates that poor communication is a major barrier to change. Elving (2004) conducted three case studies to investigate the relationship between communication and readiness for change. He found that lack of information and high uncertainty were important predictors of low readiness for change. Survey results from a study with over a hundred participating organizations showed that both the frequency and the quality of the information provided about the impending change was a problem in threequarters of the cases. A multiplecase study with six organizations showed that insufficient information and communication about the change and the communicative behavior of top managers were major problems inorganizations involved in constructive change aimed at the improvement of strategic,structural, cultural, and work issues.

Purpose of the Research Study:

As we all know Communication is omnipresent. Without it, the basic functions planning, organizing, coordinating, budgeting, monitoring, controlling, staffing, delegation; and including marketing, production, financing, human resource managing, research and development, purchasing, selling, etc could not be well coordinated, harnessed and their goals achieved. Organizational communication, or corporate communication, or internal communication what ever the name we call it, is vital for organizational management, development and success. The aim of this paper is to study the organizational or internal communication practices and their role in organizational development in IT industry.

Scope of the Study:

To study the internal communication practices, organization's structure should be known. Then, different communication practices and processes in the organization, whether vision and mission of the organization known to the internal customers i.e., employees should be known. The effectiveness of communication in the sense of openness of communication, adequacy of communication and effective methods of communication in the view of both employee, and manager will help to know about the communication practices in the organization.organization development factors studied are decision making, management effectiveness, goal setting, organization restructuring, teamwork, self-directed teams, and employee empowerment.

Hypotheses of the study:

1. Modern communication practices enhance the effectiveness of communication.
2. Organizationstructureplayanimportant role in flow of communication
3. Organizational communication practices contribute to Organizational Development.
   - Organization communication practices influences goal setting process

- Organization communication practices play a role in restructuring the organization
- Organization communication practices contribute to teamwork
- Organization communication practices leads to employee empowerment

Objectives of the study:

1. To study the organizational structure of the IT industries in Pune.
2. To study communication practices in IT organization
3. To study OD practices in IT Industry
4. To study the role of communication in OD in IT industry.
5. To develop communication model for OD in IT industry.

Research Methodology

This research is primarily descriptive study

Primary data collected by interviews, observation and questionnaire. Secondary data collected by referring research journals, books, and different websites.

Questionnaire structure:

Questionnaire has four questions to know about the company's general information. Eight questions asked to know about the organization's structure. Six questions asked to know the details about communication practices in the organization. Process of communication discussed in 10 questions grouped together. Vision and mission of the company dealt in a group of seven related questions. The researcher tried to know about effectiveness of communication through the questions based on openness of communication, adequacy of communication and effective methods of communication.

Role of Communication practices in Organization Development dealt through the questions based on the factors, decision making, management effectiveness, goal setting, organization restructuring, teamwork, self-directed teams, and employee empowerment.

Results and Discussion:

The research tool questionnaire

The no. of tested questionnaires – 20

1. Crronbach's alpha – 98%

Case Processing Summary

	N	%
CasesValid	2	8.7
Excluded[a]	21	91.3
Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Scale: ALL VARIABLES

Reliability Statistics

Cronbach's Alpha	N of Items
.987	109

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
401.500	9384.500	96.8736	109

 ISBN: 978-81-910118-7-6

2. Gutmann split Half

Case Processing Summary

	N	%
CasesValid	2	8.7
Excludeda	21	91.3
Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.948
		N of Items	55a
	Part 2	Value	.986
		N of Items	54b
		Total N of Items	109
		Correlation Between Forms	1.000
Spearman-Brown Coefficient		Equal Length	1.000
		Unequal Length	1.000
		Guttman Split-Half Coefficient	.942

All Variables

Scale Statistics

	Mean	Variance	Std. Deviation	N of Items
Part 1	197.000	1352.000	36.7696	55a
Part 2	204.500	3612.500	60.1041	54b
Both Parts	401.500	9384.500	96.8736	109

All Variables

Validity tested through:

Face Validity, content validity and construct validity – Questionnaire checked by guide, experts, and Managers in IT industry.

Conclusion:

As both Cronbach's Alpha, and Spearman-Brown Coefficient test's support, which are given satisfactory results for validity and reliability of research tool, the researcher planned to carry out the study with the questionnaire.

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A Study on Innovative Human Resource Practices Adopted by Selected Software Firms

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Abstract:

Business success today revolves largely around people, not capital. This is of great significance especially in 'people businesses' like software companies with relatively high people costs and low capital costs. Innovative approaches would motivate the employees in software companies to utilize their set of skills and knowledge through discretionary effort realizing firm's business strategy. This approach to human resource management is likely to contribute to improved economic performance of the firm. Innovative arrangements also have the potential to increase employee morale, thereby improving performance through reduction in grievances and through greater effort and diligence.

HRM innovations not only result in tangible organisational results but also assist organizations in developing innovative solutions as the need arises. Software companies are employing innovative human resource practices which are different from the brick and mortar companies to manage their human resources.

HR practices in software firms bring out human resource outcomes like job satisfaction, organisational commitment and organizational citizenship behavior among its employees. Adopting and sustaining progressive human resource management programs is a critical issue faced by many organisations today. There is still much to be understood about when innovations in human resource management practices successfully take hold and when they do not. Although innovative personnel programs are frequently adopted to improve the workplace, many organisations fail to systematically evaluate their effectiveness after the implementation. This paper tries to focus on whether the importance, introduction and satisfaction of innovative human resource practices lead to favorable or unfavorable outcomes among the employees in the software firms.

Key Words: *People businesses, Organizational commitment, Human Resource Practices.*

Human Resource Management relates to the effective management of employees, but we know remarkably little about how employees, as the subject of HRM, react to its practice.

- Grant and Shields

Introduction:

In the competitive environment, there is an increased emphasis on organizational efficiency and effectiveness, wherein human resources play a very important role. Therefore, human resource manager's role is becoming more dynamic and challenging today than ever before, as human resources are vital components of the organisation. Management of these resources, therefore,

ISBN: 978-81-910118-7-6

is an integral part of business success. HR activities are increasingly becoming more important in the organisation and the human resource management has become one of the major business functions. Human Resources are not only the most important but also most expensive and most delicate resources thus requiring a gentle treatment. They are the resources which have feelings and behavior patterns, which are not easy to predict. Hence there is the need for effective management of human resources irrespective of the size and nature of the organization.

Human resource management has an important role to play in equipping the institutions with the personnel necessary to meet the challenges of an expanding and increasingly competitive sector. Increases in the number of employees, contractual diversification and changes in the demographic profile of the employees are reconfiguring the role and significance of human resource management. HR functions are responsive to current staffing needs, but can be proactive in reshaping institutional demographics and staff trends. HR practices play a significant role in shaping, influencing and enhancing the capability of the employees. Human resource management aims at obtaining capable people for achieving the objectives of the organization and for ensuring that their efforts are utilized effectively. As the success of any organization largely depends upon the quality of its personnel and the extent to which they are motivated, personnel management acquires special significance in an enterprise.

Adoption of new liberal policies in India has provided immense opportunities to its industries. Success story of India's Software Industry is a step in the same direction. The Software Industry, which is a main component of the Information technology, has brought tremendous success for the emerging economy. India's young aged manpower is the key behind this success story. Presently there are more than 500 software firms in the country.

According to NASSCOM, India's domestic market grew by 24 per cent. Presently Indian companies have concentrated on only two largest IT service markets. They are USA and the UK. Even Canada, Japan, Germany and France represent huge growth potential in the industry. Presently for further strengthening the industry, the Government has stepped forward with more qualitative institutes. Human resources are critical in the software industry. Human resources are not only the drivers and principal value-creators but also they are the intellectual property of the industry. Therefore attracting, training, developing, appraising, compensating and rewarding are the critical factors. Keeping in view their importance it is thought necessary to study HR practices in software industry.

Software industry is in boom. Though industry runs through machines, it is the fact that these machines are managed by men. Hence they are considered as valuable resources. Moreover the success of any organization depends on the performance of people in the organization. There must be a proper fit between business

strategy and human resource strategy. Hence organization needs to formulate best strategies for its human resources and facilitate in achievement of organizational objectives.

The intentional introduction and application of any previously unused concept, practice, process orsystem is designed to influence or adapt the behaviour of employees with the aim of achievingimproved organisational performance, identified and implemented by human resourcepractitioners.New economic realities have put pressure on the human resource function to demonstrate how it canadd value to the firm's bottom line. Early conceptualizations often questioned the function's relevanceto organisational effectiveness, mainly for the fact that HR was seen to hold a primarily a reactive, administrative role. Moreover, a typically theoretical approach to HRM has made it difficult in the pastto articulate how the HR function could actually influence strategic level objectives.

Innovative HR Practices

1. **Hughes Software Systems:** In Hughes Software Systems, Managers give "Snap Awards" for individual and team achievements to their teams when they excel or do something outstanding. These are usually given during the quarterly staff meetings where all employees participate and this is followed by a party.

   Managers send nominations every year and a task force of senior managers picks the winners.There are Presidential Awards for overall excellence in Engineering, Business Development, Non-Engineering, and Engineering/Customer Support. These Awards provide very powerful peer recognition. This is very credible and most satisfying. The winners are then put in special roles e.g. the winner of "Best Leader" award is the one who conducts the session on leadership in the development program for managers. The person chosen as the "Best Mentor" leads the implementation of the mentoring program. Employees who show capability, initiative and interest are appointed to work and lead in several cross-functional taskforces from time to time.

   E-greetings have been operational is HSS through the intranet to send appreciation to other employees. Special cards suited to the HSS environment are available. This is a good way of recognizing and appreciating others, especially for those who find face to face appreciation somewhat uncomfortable.

2. **CISCO:** CISCO isprovided them with HR tools, technologies, and online tools etc. which give employees an edge over their counterparts in other organizations. At the click of a button, a manager can look at the database of his/her own people, track history of development, increments, promotions, stock options etc. They are also given the rating and ranking tools. They

 ISBN: 978-81-910118-7-6

could recommend changes and training needs and they could draw upon the resources available. Technology is deployed in a very effective way.

3. **Mind Tree Consulting:** Once in three to four weeks, they call up employees and give them information as to what is happening. Whenever there is a project win or a customer delivery, they ring the bell in the company to inform everybody. The Mind Tree Consulting have the CEO's snapshots which is released once in two weeks, the in-house magazine, meet the "Mind Tree Minds" (the way we call our employees), where the computer selects some names at random and they meet the senior people to get the right perspective of what they are doing, why they should do it, etc, and to make sure that there is enough interaction. All these things enhance communication, security, sense of belonging and commitment towards the organization.

4. **Wipro Technologies:** Every four months Wipro conduct an employee survey where all employees provide inputs on the health of the workplace. This survey enables to identify how strongly the person feels about the organization, and how strong is the person's clarity of his/her existence in the organization. It also enables to see the person's own ability to identify with the vision of the organization, and whether he thinks the organization listens to what he has to say. It also reveals whether the employees feels that their supervisor takes interest intheir development, and received any word of praise from the boss for a good job done and so on. This proves to be an eye opener for the managers as well.

   Wipro have the HR review in the planning cycle, which is a rigorous process involving everyone, right upto the head of the organization. There is a program, which is known as "wings within'- an internal job posting system. This works well, as people can apply for jobs in other departments and they do not have to inform their supervisors about it. If selected they can move out and nobody can stop them. This gives people thefeeling that they are not buttonholed into a particular type of job.

   The CEO Mr.AzimPremji spends 3 to 4 hours with every new group of employees, briefing them about our promises, values and beliefs.

5. **SUBEX Systems:** There are lots of HR policies of Subex, which are worth highlighting. One is our Feel the Pulse meet. As per the program every Subexian will have to meet up his senior Subexian, (not the immediate manager, but the manager who is one level above). This happens once in six months. This is basically for the senior Subexian to feel the pulse of the junior, to know whether he is doing well or not, whether he is enjoying his job or not, where are the areas where he needs support etc.

Even a house concept is interesting and plays a crucial role in keeping people together. Each and every Subexian belongs to one of the four houses and every year the constituency and the names of the houses change. During house meetings everyone meets up and it integrates people across various levels, functions and locations.

6. **Philips Software Center:** In Philips Software Center employees can join a Tech program or an MS program or even pursue a Ph.D. The Company will fund them right up to 100% of the cost. Once an employee completes 3 years with Philips Software is considered for an international assignment within Philips. Further any employee who completes 18 months experience can seek transfer from within the company, from one technology to the other, one product division to another. The organization facilitates such a job rotationsystemati callyInthe cafeteria, they provide a diet meal section to interested employees and it is well appreciated.

   Another brilliant concept practiced is the Philips Yellow pages. It is an internal network, which connects people across all our offices worldwide. It is very easy for one to locate people who are known for particular domain knowledge or a skill or talent.

   Any employee, who needs to learn about a subject, can get connected to the subject expert through the yellow Pages.

Philips is probably one of the few organizations which have an offsite three-day Leadership program for all its managers. They have a community involvement team. The team is entirely manned by young professionals. A budget is given and they decide how to use the money. There is no interference from any senior managers.

The organization believes that charity begins at home. They have a green team, which monitors environmental related issues so far as it relates to the organization. Young professionals areinvolved in this. Thus we ensure that environmental concerns are not just spoken about but we actually do something about it.

There is some compulsory training that every appraiser and the appraised go through before the appraisal. They have one full day training program for managers who do the appraisal. It is mandatory. If the manager doesn't go through it, the company holds the right to not let him dothe appraisal. This training is not a once in a lifetime affair. Every year before the appraisal, the training is given. They have plenty of reward programs. They closely watch people who contributetowards product quality, process quality, internal trainers who train colleagues, people whobring best practices from outside and implement if here and so on. They are rewarded and as you know rewards are inspiring and infectious.

Soon after a person joins our organization (within one, one and a half months), the HR managers are expected by training, to sit with every new employee

 ISBN: 978-81-910118-7-6

and start capturing what he or she likes best in the organization, we take inputs about matters regarding say, if he or she has the power to change what would he or she change in the organization and where do they think they can contribute a lot more than what is presently done and so on.This feedback is carried to the management team of the organization and the employees are given the opportunity in termsof their interest in technology and outside of technology, into more suitable platforms.

Conclusion:

Organizations can gain competitive advantage by implementing successful HR practices. Such practices consistently generate attentiveness on the part of employees to attain business goals in the best possible and ethical manner. The use ofinnovative HR practices contributes to enhance employee commitment and is in turn linked to higher levels of productivity and quality of services. It is also stated that HR plays a vital role in having the right people through whom strategies of the organization will be executed.

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Strategic HRM: An Effective Tool for Global Competitiveness

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Abstract:

This article extends the literature on the role of Strategic Human Resource Management in Global Competitiveness by focusing on the ability of firms to create a sustainable competitive advantage through the strategic management of their workforce. It depends on the ability of managers to think strategically and draw competitive advantage from the available talent pool of human resource on global platform. Strategic approach to human resource refers to the relationship between human resource practices and strategic objectives which indicate the long term goals of the organization. With the increasing recognition of the potential of human resources in providing competitive advantage, organizations have begun to consider employees as strategic assets or investments. This view has become more significant in today's knowledge economy. From being a routine, administrative and reactive function the HR function today has evolved to being proactive and strategic. The rapidly changing global business environment calls for high knowledge ability on the part of the human resource managers, to function effectively as strategic business partners. Human resources if managed effectively can become a competitive advantage. So in nut shell we can say that Strategic HRM is an effective tool for global competitiveness.

Key Words: *Strategic HRM, Global Competitiveness, Knowledge Economy, Strategic Assets, Sustainable Competitive Advantage, Strategic Business Partner.*

Introduction and Objective of Study:

Indian economy, after decades of confinement, has experienced a revolutionary change. Liberalization has resulted in sudden and increased levels of competition for Indian organizations from multinational organizations, globalization and internationalization of domestic businesses, unbridled imports, concerns for total quality management, incentives to export, demographic changes in the employee profile, retraining and redeployment of workforce, focus on performance appraisal and performance based incentive systems and rightsizing. Efficiency and effectiveness within the organization, have become imperative for organizations, driven by economic restructuring and competitive forces of the environment. The extensiveness of typology of managerial innovation has centered on western nations and has not diffused too many developing countries and their organizations. HR function must reshape itself to deliver the strategic value that today's business environment demands and refocus its energies to become

 ISBN: 978-81-910118-7-6

a change catalyst and leader. HR is in a position to shape corporate culture, spread best practices, and drive enterprise-wide consistency of important shared values and messages. The human resources function is at a crossroads, as new technologies create opportunities for more strategic leadership in the management of human capital and corporate culture, thus commoditizing some of HR's traditional administrative functions. In this information age HR can proactively help drive business results and business transformation and can further the corporation's business goals. The objectives of the present study:

i. To bring out the significance of the strategic role of HR.

ii. To analyze Strategic HRM as an effective tool for Global Competitiveness.

Literature Review:

Strategic Human Resource Management refers to the policies, practices and systems that influence employee's behavior, attitudes and performance. It plays a key role in attracting, motivating, training, developing, rewarding and retaining employees. HR is completely based on organizational human behavior. Previously some people, organizations, tend to view that HR is strictly operational and that HR function is merely a burden, an agency, hiring employees carrying out the day to day operational tasks. But today HR is looked upon as a crucial functional body by the organization and so given much attention to reap its benefits.

The Significance of the Strategic Role of Human Resource HR has a leadership opportunity toward a more strategic role in an organization. It is more transaction oriented as it glues together behaviors and expectations. This means need to focus on creating a work environment that promotes continuous learning inculcating innovative programs ranging from performance management to talent development.

Technology can enhance HR's strategic role by helping speed cultural change. Certain organizations consist of heterogeneous teams, cultures and processes, so there should be a common DNA across the organization and communication. The strategic approach to human resource management includes assessing the organization's environment and mission; formulating the organization's business strategy; assessing the human resources requirements based on the intended strategy; comparing the current inventory of human resources in terms of numbers, characteristics, and human resource management practices with respect to the strategic requirements of the organization and its services or product lines; formulating the human resource strategy based on the differences between the assessed requirements and the current inventory; and implementing the appropriate human resource practices to reinforce the strategy and attain competitive advantage.

Strategic HRM add value to Business:

Competitive Advantage through people:

While people have always been central to business organizations, today they have taken on an even more central role in building firms competitive advantage. Particularly in knowledge based

industries such as software and information services, success increasingly depends on intellectuality, talent of its people. Number of experts now argues that the key to a firm's success is based on establishing a set of core competencies integrated knowledge sets within an organization that distinguishes it from its competitors and deliver value to customers. For this the organizations are taking maximum efforts on their part by providing rigorous training and development to its employees, so that its human assets are well equipped with the latest information.

E.g.: McDonalds has developed core competencies in management efficiency and training. Federal Express has core competencies in package, routing, delivery and employee relations. Thus Organizations can achieve sustained competitive advantage through people.

Human Resources as a Pool of Human Capital:

Barney (1991) emphasized that human capital resources refer to the characteristics of both managers and workers in the firm. He speculated that the managerial team might constitute a source of competitive advantage. Wright McMahan and McWilliams (1994), however argue that the larger pool of human capital that constitutes the entire organization is more likely to be source of sustained competitive advantage.

The idea that organizations compete through people highlights the fact that success increasingly depends on an organizations ability to manage human capital. The term human capital describes the economic value of knowledge skills and capabilities. If valued employees leave a company, they take their human capital with them and any investment in the company. HR programs and assignments are often the conduit through which knowledge is transferred among employees. HR group plays a key role in developing human capital. HR managers and line managers play an important role in creating organization that understands the value of knowledge documents the skills and capabilities available to the organization and identifies the ways of utilizing that knowledge to benefit them.

The Human Resources are of Value:

People are a source of competitive advantage when they improve the efficiency or effectiveness of the company. Value is increased when employees find ways to decrease costs, provide something unique to customer. Empowerment programs, total quality initiatives and continuous improvement efforts at companies are intentionally designed to increase the value that employees represent on the bottom line. According to the resource-based view a resource must first be valuable in order to provide a source of sustainable competitive advantage. Firm Specific Human Capital Theory provides an explanation of the conditions under which human capital can create value for firm (Hashimoto 1981). According to this theory, when the demand for the labor is heterogeneous that is when the jobs of the firm differ and these jobs require different skills and the supply of the labor is heterogeneous that individual differ in both types and levels of their skills then human capital can create value for

 ISBN: 978-81-910118-7-6

the firm. Steffy and Maurer (1998) provide evidence that in fact the demand for and supply of labor are heterogeneous across most industries.

The Human Resources are Rare:

A resource must also be rare if it is to be a source of sustained competitive advantage. As the human skills are normally distributed in the population (Jenson 1980), human resource with high skill levels are rare, that is only a relatively small proportion of individuals in any human resource pool will have high skill levels. Thus to the extent that jobs require skills that allow for variance in individual contributions, firms with high average skill levels relative to their competitors possess a rare resource. In addition firm that because of their international operations can draw from more than one labor pool have a greater potential for developing a human resource based sustainable competitive advantage than the domestic firm having one labor pool. People are a source of competitive advantage when their skills, knowledge, abilities are not equally available to competitors. E.g.: Companies such as Microsoft, Sun Microsystems, McKinsey invest a great deal to hire and train the best and brightest employees in order to gain advantage over their competitors.

The Human Resources as In imitate:

Unless the resource is difficult to imitate it cannot be a source of sustainable competitive advantage. Barney (1991) argues that the resources will be more difficult to imitate in the presence of casual ambiguity and social complexity. Human resources often lead to casual ambiguity and social complexity. Employee capabilities and contributions should be so possessed that they cannot be copied by others. E.g.: Walt Disney is known for creating unique cultures that get the most from employees and are difficult to imitate.

Human Resources as Non-substitutable:

If the resource is good source of a sustainable competitive advantage then it is obviously having no good substitute for the same. Therefore we argue that other resources viz. non-human resources have substitute in short term but the human resources will not have substitute in long term. If a firm has obtained individuals with high levels of learning capability, then constant training in the state-of-the-art technological skills ensures that the resource does not become obsolete. The number of companies with comparable R&D resources increases as an industry becomes global. The amount of knowledge available to build on increases as the number of firm increases. Finally property rights to intellectual capital become increasingly hard to protect. This argues that as competition becomes increasingly global, technology is increasingly imitable which in turn argues for the increasing importance of human resources as non-substitutable source of sustainable competitive advantage.

Globalization through HR:

HR helps to face globalization, to go global for an organization. When managers talk about going global, they have to balance a complicated set of issues related to different geographies, cultures, laws, and

business practices. Human resources issues underlie each of these concerns.

HR helps to embrace New Technology:

An online H R service provider helps clients to manage, recruit, train and develop their workforce. HR managers can identify methods or strategies for introducing new technology that minimizes disruption and also minimizes fears and concerns of employees.

Managing Change through HR:

To bring about change in organization, managers have to envision to employees, set clear expectations for performance and reallocate assets. Therefore managers have an important role in facilitating change processes particularly in helping communicate business needs to employees and in listening to employee concerns.

Responding to the market by TQM through HRM:

The quality standards and customer expectation requires organizations to constantly align their processes with customer needs. Management innovations such as TQM and process re-engineering are but two of comprehensive approaches to responding to customer. Each has direct implications by HR. When TQM initiatives do work, it is usually because managers have made major changes in their philosophies and HR programs. Organizations know for product and service quality strongly believes that employees are the key to that quality.

Reengineering and HRM:

In recent years organizations have gone beyond TQM programs to a more comprehensive approach to process redesign called reengineering. For reengineering HR managers need to create an environment for change. Reengineering efforts depend on effective leadership and communication processes, which are the areas of HRM.

HRM brings about Downsizing:

Downsizing is the planned elimination of jobs. To bring about successful downsizing, is possible only through an effective HR system because HR has an obligation to help maintain the relationship between a company and its people.The HR function in India has undergone a drastic change both in contents and scope.

Methodology:

In the present paper efforts were made to understand the significance of strategic HRM in achieving competitive advantage by thorough review of literature and further various caselets viz. Carly Fiorina: CEO of Hewlett-Packard (HP), Diversity Initiatives at IBM, Challenge for the Mind, Reward for the soul: Training at Wipro, The Delphi Method at Bharat Heavy Electricals Limited (BHEL), HR Policies at Tata Steel, were discussed to justify the efforts and strategic initiatives taken by corporate to gain competitive advantage through Strategic HRM.

Discussions:

Caselet No. 1: Carly Fiorina- CEO of Hewlett-Packard (HP)

Carly S. Fiorina joined HP in July 1999, Soon after becoming the CEO, Fiorina realized that HP needed reinvention

ISBN: 978-81-910118-7-6

i.e. inventing new uses for the existing technology. Under her leadership and guidance, HP returned to its roots of innovation and inventiveness. Her main strengths are her ability to conceptualized and communication strategies, ability to deliver financial goals, and skills to drive 'Net Vision, throughout the organization.

Fiorina systematically restructured HP to provide both a coherent, unified face to the customer and renewed commitment to engineering excellence, R&D and intellectual Property. She consolidated 83 independent product lines into 17 product categories. This allows the company to reduce redundant overheads and channelize the savings into R&D and Sales. She also introduced a " Total Customer Experience" program to track, measure and enable the organization to focus on customer needs and exceeds customer expectations.

She made a bold move by planning a merger with Compaq, another computer giant. With the merger, she could double the service and support capacity in the area of mission critical infrastructure design, outsourcing and support. The merger doubled the size of Hp's sales force to 15,000. The R&D increased to more than $4 billion a year and added important capabilities to HP labs. Florina's vision is to combine computing power with communications to revolutionize the way data and image flow and are printed in cyberspace. As a leader for Fiorina is to propel HP into the internet age without sacrificing employees who have made the company great. Thus strategic perspective added value to HP to gain competitive advantage.

Caselet No. 2: Diversity Initiatives at IBM

At IBM diversity is seen as the "bridge between the workplace and the marketplace" and it has become central to IBM's ability to win in the global marketplace. Diversity permits every facet of IBM's management and technical operations. Under Gerstner's leadership, 40% of IBM's top 54 members of Worldwide Executive Council are women, multicultural or people not born in US. These women and multicultural executives are given significant responsibilities in the organization. Thirty members of IBM's Worldwide Executive council are involved in guiding specific corporate –wide diversity initiatives. They are accountable for recruiting, retaining and developing talent and the most important for linking IBM's diversity initiatives with the global marketplace.

Caselet No. 3: Challenge for the Mind, Reward for the soul-Training at Wipro

Wipro believes in individual growth and overall development. It recognizes the potential of employees and offer them opportunities for further learning. Wipro's training programs are widely appreciated by its employees and are among the best in the Industry. Every year a large number of software engineers become qualified professionals in their chosen field. Training facilities at Wipro are well-equipped and can handle 80,000 man days of training every year. Wipro has a virtual campus which integrates multimedia, instructor led and real time learning techniques

into facilitated and collaborative learning environment. Wipro calls this method as 'e-learning' The objectives of e-learning are to make training available to the entire base of employees and to address the needs and problems of real world. In addition to this Wipro had educational tie-ups with the Indian Institute of Management(IIM), Bangalore, Birla Institute of Technology and Science, Pilani. The purpose of educational tie-ups is to allow employees build on existing qualification. Wipro also has leadership programs viz. Entry Leaders Program: designed for new recruits from campus to industry, New leaders Program: designed for first time managers, Wipro Leaders Programs: designed for middle level managers, Business Leaders Program: designed to enhance commercial orientation, business development, and legal and customer interaction skills, Strategic Leaders Program: Designed for top management. The Wipro Academy of Software Excellence (WASE) aims at preparing some of the Bachelor of Science students for the application programming environment. The course enables fresh graduates to develop skills to work in a growing software company. Thus at Wipro training programs provide an understanding of how required competencies can be developed to help employees perform better and increase their productivity. After each training program, action plan are developed which are implemented by the managers through ongoing feedback. Thus strategic perspective of Wipro in training and development area offers competitive advantage to WIPRO.

Caselet No. 4: Delphi Method at Bharat Heavy Electricals Limited (BHEL)

BHEL is the largest heavy-electrical-equipment manufacturer in India. It offers a wide range of equipment, system and services in the field of power, transmission, transportation, non-conventional energy sources, oil & gas and telecommunication. BHEL used Delphi process which involved 286 company members from a variety of engineering disciplines to estimate technological breakthrough in the industry. In the first round, prospective respondents were sent an open-ended questionnaire regarding major technological breakthroughs that could be developed within the next 30 to 40 years, Participants were also asked to estimate when they expected the technological breakthrough to occur. In the second round participants were given a list of possible technological breakthroughs. They were also told when these estimates were expected to occur. Participants were given an opportunity to revise their timing estimates and provide fresh ones. They were also asked to rank each technological development as per the requirement of the organization. In the third round, participants were asked to comment on the new information about time estimates collected in round 2. They were also asked for their final estimates and the reasons for their forecasts. Thus the Delphi process led to the development of 19 different forms of energy sources. It also provided guesstimates regarding when such energy sources will be discovered. BHEL found these estimates absolutely useful

 ISBN: 978-81-910118-7-6

for corporate planning and formulating R&D projects. Thus strategic perspective of BHEL added value to BHEL's competitive advantage.

Caselet No. 5: HR Policies at Tata Steel

Tata Steel strongly believes that its people are its primary source of competitiveness. It creates equal employment opportunities to attract the best talent. To maximize the productivity of workers, the company design management practices that enrich the quality of employees work life. It also ensures fairness and transparency in all its dealing with the employees. The company strives to foster a climate of openness, mutual trust and teamwork.

Findings and Conclusions:

Strategic HRM gives direction to carry out following multiple HR activities in organization on long term basis viz. Formulation of Personnel Policies & HR Practices, Job Analysis & Job Design, Manpower Planning, Profile Mapping, Recruitment & Selection, Training & Development, Performance Appraisals, Career Planning & Succession Planning, Mentoring, Leadership & Team Management, Managing Employee Relation, Corporate Communication, Compensation Management, Personnel Administration, Industrial Relations, Organizational Development, Information Support to Senior Management, Career and Succession Planning, Change Management, Business Ethics & Labor laws, Organizational Behavior Management by motivation Process, Stress Management, Increasing Job Morale, Group Dynamics, Organizational Design, Leadership Management, Conflict Management, Quality Management Personnel Research (Benchmarking), Employee Grievance Redressal, Absenteeism Employee Turnover Management, Separation Schemes, Personnel Audit, Analysis of Exit Interviews, Organizational Culture & Climate. These activities in turn help organization to set effective HR Policies and Practices at workplace so that the optimum utilization of the most important assets of the organization ensured to ensure competitive advantage. All these trends are to be brought into the organization through HR only. The HR managers have the responsibility to educate other managers about the benefits accruing from practicing the above activities and help them implement these ideas. For better personnel administration, both the management and the employees unit will have to formulate clear policies and targets, identify training and development needs and provide facilities for them, maintain close contacts with all levels of personnel.

HR's Role as a Strategic Business Partner of Firm:

Some people still tend to view that HR is strictly operational and that HR activities are not strategic at all. But today the view of HR should be or is that its role is to fit the company's strategy. In this respect HR's strategic role is to adapt individual HR practices like recruiting, appraising etc. to fit specific corporate and competitive strategies. Top management crafts a corporate strategy and then HR is told to design the various programs required to successfully

implement that corporate strategy. Also today HRM is viewed as an equal partner in the strategic planning process it is not merely an agency hiring employees carrying out the day to day operational tasks but HR is an equal partner in both the formulation and implementation of the organizations competitive strategies. Today HR participates in the strategy formulation process by supplying information regarding company's internal strengths and weaknesses.

So we conclude that Strategic Perspective towards Human Resource Management adds value to business as firms can gain competitive advantage through people, Human Resource as a Pool of Human capital, Human Resource are of value, rare in imitate and non-substitutable. Through Strategic Management of Human resources firm can go global, can embrace new technology, can manage change effectively, respond to the market by TQM, can do reengineering and also can do successful downsizing as and when required. From the various above mentioned practices if conducted in an effective manner, Strategic HRM help the organization in achieving its goals in long term and in turn can gain competitive advantage.

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ISBN: 978-81-910118-7-6

Leadership Style and Personality as a Predictor of Organizational Citizenship Behavior – A Review Article

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Abstract:

Organizational citizenship behavior is a newly emerging concept in the literature of organization behavior. Organizational citizenship behavior in an employee is like an asset to an organization which can help organization in multiple ways through improved organizational performance and growth. The organizational behavior of an employee to a great extent depends on his individual personality type, if a person has agreeableness as his personality then he could have better OCB than the one with narcissism. Similarly the leadership style of the superior also affects the behavior of the subordinate. This article discusses about this concept in depth.

Key Words: *Organizational citizenship, organizational performance, Individual personality, Leadership.*

Introduction:

Organizational citizenship behavior generally considered as a discretionary and the voluntary behavior has found to be the reason for many outcomes like organizational effectiveness, human resource productivity, job satisfaction etc. This made the researcher to find the antecedents behind the exhibition of Organizational citizenship behavior. After reviewing the literature it was found approx fourteen antecedents are responsible for increase in the organizational citizenship behavior of which the major antecedents are the Leadership quality of the superiors and the personality of the employee itself. The researcher here aims to discuss the findings suggested by the different researchers.

Organizational citizenship behavior in an employee is like an asset to an organization which can help organization in multiple ways through improved organizational performance and growth. But its not a one way process the organization and the employees both need to contribute for the same. The organizational behavior of an employee to a great extent depends on his individual personality type, if a person has agreeableness as his personality then he could have better OCB than the one with narcissism. Similarly the leadership style of the superior also affects the behavior of the subordinate. Hence, there comes the need of the study as it discusses about the factors and its impact on the development of OCB in the employees.

 ISBN: 978-81-910118-7-6

Statement of the Problem:

An organization is known for its competitive environment, where there is cut throat competition everyone is in effort to impress the boss and take the lead, perhaps that is the reason for low citizenship behavior amongst employees of such an organization, which in long term is dreadful for an organization's growth. Hence the need is to develop such a healthy environment in an organization that can increase team work, supportive leadership, happiness, satisfied employees, security for job etc that will automatically lead to an employee with increased citizenship behavior resultantly high employee retention, motivates, happy and satisfied employees will definitely bring more growth to an organization in comparison to unhappy and unsatisfied employees. Hence the solution to such problem is developing OCB in the employees. This will also give idea to an organization about the different personality types which can be lucrative for the organization.

Organizational Citizenship Behavior:

Organizational citizenship behavior is a newly emerging concept in the literature of organization behavior. Dennis Organ is generally considered the father of OCB. Organ (1988) defines OCB as " individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. Organ's definition of OCB includes three critical aspects that are central to this construct. First, OCBs are thought of as discretionary behaviors, which are not part of the job description, and are performed by the employee as a result of personal choice. Second, OCBs go above and beyond that which is an enforceable requirement of the job description. Finally, OCBs contribute positively to overall organizational effectiveness. While going through the research it has been found that despite increase number of studies on Organizational citizenship behavior (OCB) no significant work has been done neither in regard to the comparison in state and central government organizations nor in relation to the impact of demographic and biographic characteristics on OCB.

According to Podsakoff (2000) OCB provides a means of managing the interdependencies among members of a work unit, which increases the collective outcomes achieved; reduces the need for an organization to devote scarce resources to simple maintenance functions, which frees up resources for productivity; and improves the ability of others to perform their jobs by freeing up time for more efficient planning, scheduling, problem solving, and so on . Through past researches it has been observed that Organizational Citizenship Behaviour have an important impact on the effectiveness and efficiency of work teams and organizations and contribute to the overall productivity of the organization. Mart and William (2003) stated that citizenship behaviours must be monitored and properly managed in order

something is left here for such behaviours to have enhancing rather than deleterious effects on organizational and employee performance.

Thus OCB is a discretionary behaviour of an employee to provide " Extra" to his organization which is not a part of his defined duty. In words of Van Dyneet (1995) proposed the broader construct of "extra-role behaviour" (ERB), defined as "behaviour which benefits the organization, which is discretionary and which goes beyond existing role expectations. "Thus organizational citizenship behaviour is functional, extra-role, pro-social organizational behaviours directed at individual, groups and/or an organization. These are helping behaviours not formally prescribed by the organization and for which there are no direct rewards or punishments. Organizational Citizenship Behaviour excludes those pro-social behaviours that are prescribed by the organization as performance requirements, and dysfunctional or noncompliant behaviours.

Organ (1988) has postulated the following types of organizational citizenship behaviours:

1. Altruism (Helping): is selfless concern for the welfare of others. Helps others who have been absent, or helps others who have very workloads.
2. Courtesy: Take steps to try to prevent problems with other workers. Does not abuse the rights of others.
3. Civic Virtue: Attends meetings that are not mandatory, but considered important. Keep abreast of changes in the organization.
4. Conscientiousness: Does not take extra breaks. Obey company rules and regulations even when no one is watching.
5 Sportsmanship: Consumes a lot of time complaining about trivial matters. Always focuses on what's wrong, rather than the positive side.

A different way of organizing the OCB construct was proposed by Williams and Anderson (1991). The dimensions of OCB was divided into two different types of OCB based on whom the behaviors were directed at. Organizational citizenship behavior – individuals (OCBI) include behaviors that are aimed at other individuals in the workplace while organizational citizenship behavior-organizational (OCBO) include behaviors directed at the organization as a whole. Altruism and courtesy are actions aimed at other employees and thus fall under the umbrella of OCBIs. Conscientiousness, civic virtue, and sportsmanship are behaviors intended for the benefit of the organization and can subsequently be considered OCBOs.

Thus in layman's language, Organizational citizenship behaviour describe actions in which employees are willing to go above and beyond their prescribed role requirements. After defining Organizational citizenship behaviour, it is important to know about the antecedents of the OCB who are the probable predictors of the OCB of an employee.

 ISBN: 978-81-910118-7-6

Personality:

The personality of an individual varies individual to individual. In words of Allport, "Personality is a dynamic organisation within the individual of those psycho physical which has unique adjustment to its surroundings."

Personality can be best described in form of its 5 components i.e. Experience, Conscientiousness, Extroversion, Agreeableness and Neuroticism which is generally called as McCrae and Costa's Big Five Model. These components are affected by the genetics rather than through the effects of one's environment. They can be described as follows:

- **Openness to Experience (inventive/ curious vs. consistent/cautious):** It reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety of a person. It is also described as the extent to which a person is imaginative or independent, and depicts a personal preference for a variety of activities over a strict routine. It includes appreciation of art, emotion, adventure, unusual ideas, curiosity and variety of experience.
- **Conscientiousness (efficient/ organized vs easy going/careless):** It's a tendency to show self – discipline, act dutifully and aim for achievement; planned rather than spontaneous behaviour; organized, and dependable.
- **Extraversion (ouygoing/ energetics vs solitary reserved):** Energy, positive emotions, surgery, assertiveness, sociability and the tendency to seek stimulation in the company of others and talkativeness.
- **Agreeableness (friendly/ compassionate vs analytical/ detached):** It means a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. It is also a measure of one's trusting and helpful nature, and whether a person is generally well tempered or not.
- **Neuroticism (sensitive/nervous vs secure/confident):** The tendency to experience unpleasant emotions easily such as anger, anxiety, depression or vulnerability. Neuroticism also refers to the degree of emotional stability and impulse control and is sometimes referred to by its low pole emotional stability.

This model has been related with the academic behaviour as well. It is found that Four of the 'big five' personality traits – conscientiousness, agreeableness, neuroticism and extraversion are found to be correlated with OCB. However, the correlations are weak, shown to be between 0.15 and 0.22 in one study (Organ & Ryan, 1995). A different study yielded a 0.24 correlation for conscientiousness (Borman, Penner, Allen & Motowidlo, 2001).

Leadership Style:

Must say leadership is the most researched areas of study practically in organizational behaviour. Leaders often develop relationships with each member

of the group that they lead, and leader – member exchange, classified as a transactional theory, explains how those relationships with various members in the group can develop in unique ways. Leader Member Exchange theory emerged in 1970 was formerly known as Vertical Dyad Linkage (VDL) Dansereau, Graen, and Haga in 1975, with their paper, "A Vertical Dyad approach to leadership within formal organizations." This theory has been extensively written about throughout the years. The leader-member exchange theory of leadership focuses on the two –way relationship between supervisors and subordinates. The theory assumes that leaders develop an exchange with each of their subordinates and that the quality of these leader – member exchange relationships influences subordinates responsibility, decision influence, access to resources and performance. This theory promotes positive employment experiences and also arguments organizational effectiveness. It focuses on increasing organizational success by creating positive relations between the leader and subordinate.

Leader-member exchange does not just define what the exchange between leader and subordinate is, but it also determines what expectations and behaviors the leader will have. Having a good rapport with subordinates is important for the leader because it is through them that the leader reaches the goals of the business. The 3 stages of LMX theory are as follows:

1. Role-taking: The member joins the team and the leader evaluates his or her abilities and talents. Based on this, the leader may offer opportunities to demonstrate capabilities. This is the stage where a leader is able to gain insight into what areas a member will do best in.

2. Role-making: In the second phase, the leader and member take part in an unstructured and informal negotiation whereby a role is created for the member and the unspoken promise of benefit and power in return for dedication and loyalty takes place.

3. Routinization: In this last phase, a pattern of ongoing social exchange between the leader and the member becomes established. Habits and routines are formed in this stage. The members work hard at building and sustaining trust and respect from their leader. The members are often empathetic, patient, reasonable, sensitive, and are good at seeing the viewpoint of other people, especially their leader.

According to research from Western Researchers (Gerstner & Day, 1997), harmonious relationships between subordinates, leaders, and the organization are required to achieve job satisfaction. The satisfaction received in the workplace result in higher level of organizational commitment by employees who are within the in-group. However, employees in the out-group with lower LMX will be more likely than those with higher LMX to engage in unethical behavior in order to compensate for their feeling of unfair treatment. Unethical behavior is harmful behavior that is considered to be unacceptable and illegal by the general public and research have indicated that unethical behavior in the workplace can be due to lack of job satisfaction. Therefore,

 ISBN: 978-81-910118-7-6

it is believe that LMX is linked directly to job satisfaction and employees' unethical behavior. In term of practical actions, managers can reduce unethical behaviors of employees by increasing social exchange and in turn improving employees' job satisfaction.

The main limitation of leader–member exchange research is that it is not particularly helpful in describing the specific leader behaviors that promote high-quality relationships. At best it only implies generalities about the need for leaders to show trust, respect, openness, autonomy and discretion.

There are some faults in the Leader-Member Exchange Theory, however. The theory involves the assumption that each individual is worthy of the same amount of trust, chance of project responsibility, and opportunity for advancement. This is not always the case. The members with the most talent will receive the better opportunities than those in the out-group, perhaps. Because of this reason, the leader must make sure that he or she is using the theory to help themselves be objective in the manners in which they deal with others.

The following leadership styles if used effectively can encourage OCB in various ways (Organ et al., 2006), though the quality of leader-member exchange (LMX) is also important.

Good quality LMX (which is simply the exchange relationship and manner of interaction between a superior and subordinate) is characterised by mutual trust and liking, and both parties feel inclined to reciprocate courteous and altruistic acts, which facilitates OCB.

Demographic Variables:

Similarly when the focus is made on the demographic variables (e.g., organizational tenure and employee gender) it has been found that they are not related to OCBs. The finding that gender is not related to citizenship behaviors is somewhat surprising, given that Kidder and McLean Parks (1993) discussed a number of plausible theoretical reasons why it ought to be. For example, they noted that empathetic concern and perspective taking should influence both helping behavior and courtesy, and both of these traits are associated with females (Davis, 1983). Conversely, Kidder and McLean Parks (1993) argued that males are more likely to engage in conscientious behavior than females, because "this type of behavior suggests an exchange orientation or an emphasis on quid pro quo, frequently associated with a male preference for equity over equality." Thus, even though the existing empirical evidence has not been very supportive of the hypothesized effects of gender on citizenship behavior, additional evidence is needed before this issue can be resolved conclusively. Of the remaining employee characteristics examined in the literature, only indifference to rewards was found to have a consistent relationship with OCBs. Indeed, indifference to rewards was negatively related to altruism, courtesy, conscientiousness, sportsmanship, and civic virtue. However, none of the other employee characteristics including ability, experience,

training, and knowledge; professional orientation; or need for independence had a consistently strong relationship with any of the citizenship behaviors

Literature Review:

The literature gives an interesting information about the relation between all the antecedents and the organizational citizenship behavior. In one of the study by George & Kenneth (1990) Leaders positive mood is positively related to the incidence of prosocial behavior in work groups and negatively related to the groups' voluntary turnover rates. Similarly in an article by Samuel, Peter & Eddie (2007) have observed that the transformational leadership style have strong effects on teacher's job satisfaction, organizational commitment and organizational citizenship behavior. In another study by Steven, Nicolas, Jonathan, Rodney, Isabelle, Chrystine & Carlo (2004) hypothesized that low employee satisfaction is a direct result of an autocratic leadership style but they weren't supported quantitatively, infact a specific high leadership style resulting in high employee satisfaction were also questionable.

In a study by Mel Schnake, Michael & Daniel (1993) They have given two different types of leadership i.e. Traditional leadership (initiating structure and consideration) and Super Leadership (self goal setting, self observation and self expectation) and there observed that super leadership explained that no incremental variance in organizational citizenship behavior beyond traditional leadership. In his study, Ronald (1995) has found the relation between charismatic leadership and subordinate organizational citizenship behavior and were found to be positively associated with supervisor reports of subordinate OCB. Similarly Eran (2007) found positive relation between leadership and performance.

According to Jill W. Graham, Different styles of leadership arouse different sorts of normative motivation among followers, and these diverse motivational sources in turn are associated with different forms of participant contribution to organizational success. The personality dimensions agreeableness and conscientiousness were hypothesized to account for commonly shared variance between job satisfaction and organizational citizenship behavior (Dennis W. Organ & Andreas Lingl,1995). Again the another study by Dennis (1998) came out with a stronger case for the role of some variant of Conscientiousness, although results indicate that the best predictor of OCB is not a "factorially pure" dimension of the Big Five, but a constellation or profile of personality facets drawn from different factors of the Big Five. George A. Neuman & Jill R. Kickul (1998) came out with the conclusion in his study that personality variables act as an antecedent in predicting organizational citizenship behaviour. Value for achievement, agreeableness, and conscientiousness predicted five types of organizational citizenship. Extraversion was not predictive across all citizenship behaviors.

Scope for Future Research

Reviewing of the literature gives the scope for literature. Personality as a predictor

 ISBN: 978-81-910118-7-6

can be a strong antecedent, the review suggests the need of future research in this direction. The past researches discusses only Big Five model as the antecedent of OCB, the researcher suggests that different types of personality theories can be considered for the study.

Researches related to the leadership also depicts more or less similar need in future research. The previous researches are linked to only Leader Member Exchange theory, here also academicians and researchers have scope for future research.

Due to lack of sufficient empirical evidences with reference to gender and OCB, it is hard to deduce anything but of course this can be a scope for future research.

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Implementation of OD Intervention Strategy for Managing Organizational Change in Indian Industry

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Introduction:

The global corporate scenario is going through turbulent time and so is the Indian corporate sector. There is a impact of global and domestic factors on Indian industries that has compelled them to changed according to the needs and demands of internal and external factors. The challenges are enormous and sustaining through them is a critical task for the organizations. Following are few of the challenges faced by Indian companies:

1. To be competitive globally
2. To be multicultural
3. To focus on continuous learning
4. To manage the skilled human resources
5. To create an adaptive culture for coping up with changing environmental demands

It is really a rollercoaster ride for an organization to go through these and other major challenges for sustainability and enhancing organizational effectiveness simultaneously. It is the top management of an organization who needs to carefully anticipate changes and forecast accordingly so that the organization can smoothly go through the transition. There is also an HR perspective to overcome the challenge of change as human resources play a very important role in the entire process. Organisations need to be flexible to adapt continually and need to create the adaptive environment within the organizations. The organizations with rigid, narrow and limited policies or strategies can't respond adequately to the demands of change.

The change denotes improvement or better beneficial state of an organization. The success of this adaption lies in how well or what planned efforts are put in by an organization. Organization aims for sustainability. The situation where in an organization is able to change itself for the long term competitive advantage is referred to as organizational change.

Characteristics of organizational change:

1. Organizational change denotes the organization's aim for sustainability.
2. Organizational change affects all systems and subsystems of an organization.
3. Organizational change is continuous in nature.

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4. Organizational change helps an organization to expand its capability.
5. Organizational change builds the adaptive culture.
6. Organizational change helps an organization to be more responsive towards the changing environment.
7. Organizational change enhances organizational effectiveness along with employee effectiveness.

Change strategies:

There are three change strategies –

- **Structural change strategies:** It deals with restructuring of on organization i.e. Changing on organization's design, line of authority, and span of control or hierarchical patterns. For e.g.-downsizing centralization or decentralization, adding layer to hierarchy or removing layer i.e. either tall or flat structure. Such kind of change needs careful planning as it is difficult to implement.
- **Technological change strategies:** Technology is an important aspect of change. Any change in technology leads to change in processes linked to it. Change in processes leads to new processes. Thus, improving production & performance of employees as well as of an organization.
- **Behavioral change strategies:** Employees are committed and give high performance when they are motivated and have high morale. If the skills and talent of employees are neglected it can lead to problems i.e. dissatisfaction & low productivity. Certain behavioral changes can help to enhance motivation & morale which helps to increase organizational performance.

Though these are different strategies for effective change management, integration of these strategies is essential. Comprehensive approach to these strategies will help to achieve organizational effectiveness & excellence.

OD : An effective tool for organizational change:

When an organization itself initiates the change with a deliberate attempt it is called as planned change. As per the demands of an environment on organization i.e. client system approach OD consultant and the efforts or techniques that are used to change i.e. OD interventions focus on individual, team and overall organization.

1) Individual Effectiveness: Each organization consist of individuals with their own unique values, attitudes and motivation. When organization seeks a change in individual behavior for change then use of OD interventions pertaining to individual development can be of great help. Interventions for individual development range from empowering them to counseling & mentoring. The assumption of such efforts is that developing better individual or employees can make effective organization.
2) Team Effectiveness: Teams form fundamental unit of an organization.

Teams or work groups play very important role in organizational effectiveness. There is range of team building interventions which fours on tasks as well as team. More effective teams may increase work motivation, improve performance and efficiency. There is an emphasis on improving problem solving processes and resolving conflicts and enhancing productivity and effectiveness.

3) Organizational Effectiveness: OD also focuses on system wide change. There are OD interventions which relate to restructuring of organizations & also are OD interventions that change entire system with the emphasis on all type of interventions, i.e. individual, team & structural.

Defining OD interventions:

Based on various concepts of OD interventions researcher defines it as ;

"OD interventions are structured activities based on the diagnosis of a client system and designed to enhance individual and organizational effectiveness in collaboration with a consultant and client system. "

Features of OD interventions:

1) OD interventions are planned activities.
2) OD interventions refer to implementation of entire OD program systematically.
3) OD interventions are decided mutually by client and a consultant.
4) Selection of appropriate OD intervention denotes careful diagnosis of current system of an organization.
5) Application of OD interventions requires participation and involvement of a client system.
6) OD interventions focus on social and task performance enhancement.
7) OD interventions differ from organization to organization based on requirement.
8) Success of OD intervention depends on the knowledge and expertise of OD consultant, either internal or external.

Classification of OD interventions:

1) Diagnostic activities: These are fact finding activities designed to find the current state of a client system.
2) Team building activities: These are designed to enhance effective operation of teams.
3) Intergroup activities: These are the activities designed to improve effectiveness of interdependent groups.
4) Survey feedback activities: These activities relies gathering information that is used in understanding problems or opportunities.
5) Education and training activities: Activities designed to improve individual's skills abilities and knowledge.
6) Techno structural or structural activities: Activities designed to improve the effectiveness of organisational structure & Job design.

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7) Process consultation activities: The activities that are designed in consultation to help the client to perceive understand and act upon events that occur in client's environment.

8) Grid organisation development activities: These activities are developed by Robert Blake and Mouton which constitute of six phase model involving the total organisation.

9) Third party peacemaking activities: Activities designed and conducted by skilled consultant to manage inter personal conflict in the process of oganisational change.

10) Coaching & Counseling activities: Activities that help the individual to define learning goals, to understand others behavior & to see how others see their behavior.

11) Life & Career planning activities: Activities that enable individuals to focus on their life and career objectives & way to achieve them.

12) Planning & goal setting activities: Activities that include goal setting, problem solving, discrepancies if any to achieve objectives.

13) Strategic Management activities: Activities that link the interventions with basic mission & environmental scanning & which helps in long range planning.

14) Organisation Transformation activities: Activities that involve large scale system changes or fundamental change in the nature of an organisation.

Each of the above mentioned interventions includes many activities. Some of the activities are problem specific & some are process specific.

Benefits of OD interventions:

1. The OD interventions are range of tools and techniques used to managed change effectively. The organization can select appropriate OD intervention as per the need.
2. The OD interventions are based on OD values and assumptions so focus on behavioral, technical and structural aspect of change.
3. OD interventions promote individual well being and enhanced performance.
4. The team building interventions creates the team effectiveness for organizational effectiveness.
5. The conflict is effectively resolved through the inter group or confrontation OD interventions.
6. OD interventions help not only to understand the job of the incumbent but also the role and responsibility in the process.
7. Effective implementation of OD interventions creates a responsive and adaptive culture in an organization.
8. The range of OD interventions offers large scale transformational tools and techniques for sustainability of an organization.
9. The OD interventions involve empowerment of employees.

10. The process of implementation of OD interventions helps in selecting appropriate OD intervention for shared vision, motivating the change, enhanced performance and organizational effectiveness.

The current trends of OD interventions in global scenario are used for following reasons:

1. Minimizing cultural barriers.
2. Building effective and high performance teams
3. Enhanced employee engagement
4. Development of individual personally and professionally.
5. Strategic decision making for sustainability.
6. More participation and empowerment
7. Enhanced productivity and quality.
8. Improvised structure
9. Building authentic and fast communication pattern
10. Organizational transformation

Indian Scenario:

Indian scenario in application of OD interventions can be termed under the phrase " still developing ". The Indian corporate world view OD as organizational renewal. The organization development involves top management for initiating change and it also gives the scope to other organizational members to be a part of the process. The credit for developing OD in India goes to the experts in the field, Dr. T V Rao, Uday Pareekh. They have contributed through various books, articles as well as training programmes. The examples of OD interventions in Indian organizations are as follows :

Table No. 1
Applicability of OD interventions in Indian companies.

Sr. No.	Name of the company	Applied OD interventions
1.	ONGC	Succession planning, employee participation, training, organizational remodeling, Climate survey
2.	Voltas	Survey feedback, climate survey
3.	TCS	Goal alignment, Balanced scorecard, culture building intervention
	Bharti airtel	Coaching, mentoring, career planning
5	Aditya Birla group	Mentorship, Rotational job assignments, career development, Leadership development
6	Infosys	Leadership development programme, personal development initiatives, cross functional assignments, 360 degree feedback, psychometric testing (MBTI) for individual personality assessment
7	GE	Employee development programme

The applicability of OD interventions in the above mentioned table is a representative

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data and there are many such initiatives taken by Indian organizations for individual, team and organizational effectiveness.

OD intervention implementation strategies focus on creating the capabilities required to sustain competitive advantage. Beer & others identify some of these capabilities as:

- Coordination & team work
- Commitment of & trust.
- Competence (technical & leadership)
- Open communication.
- Creativity
- The capacity for constructive conflict
- Learning

The research also aims to analyze the impact of OD interventions on managing organizational change.

Research Methodology:

The study was conducted in Pune region and in selected manufacturing companies. The following methodology was adopted for the research:

Objectives of the research:

1. To study Organization Development Interventions in selected companies in Pune region.
2. To analyze the parameters for organizational change.
3. To study the opinion of top management in managing change through OD interventions.

Hypothesis of the research:

1. OD interventions have helped in managing change effectively.
2. OD interventions have helped in sustainability.

Sample Universe:

- Manufacturing companies in Pune region.

Sample Population:

- 110 top management employees from 8 manufacturing companies in Pune region

Sample size:

44 top management employees

Research design:

Descriptive and exploratory.

Data Source:

Based on primary and secondary data source

Sampling design:

Selective and disproportionate random sampling.

Research instrument:

A questionnaire was designed based on Likert Scale with rating scale based on:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

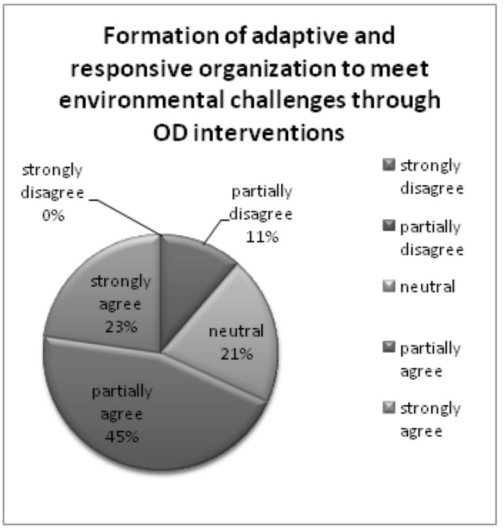
Validity of the instrument:

A questionnaire was tested from various experts from the field.

Reliability of the instrument:

A reliability was tested with Cronbach Alpha, which came to 0.92 which is considered excellent.

Data Analysis:



Graph no.6.1.1

Observation: It is observed that the 68 % of the respondents agree that there is formation of adaptive organization and organization has become responsive through implementation of OD interventions. The organizations face various environmental challenges today and through implementation of various interventions which focus on individual, team, intergroup and organization wide interventions the organization preparedness for accepting such challenges enhances.

But considering neutral and disagree opinion it is also important to note that there is a scope for improvement.

Graph no.6.1.2:

Observation: It is observed that 89 % of the respondents agree that commitment and sustainability is enhanced through implementation of various OD interventions. It can also be noted that there is no disagreement on the same. But the neutral responses show that the few respondents have reservations about it though majority accepts it.The sustainability being a challenge today for most of the organizations commitment to accept challenges play a very important role. The analysis highlights the utility of OD interventions for the same.

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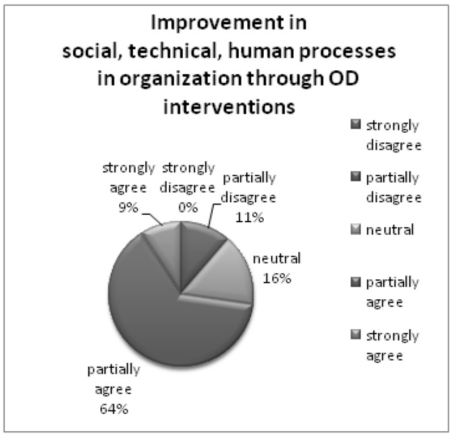
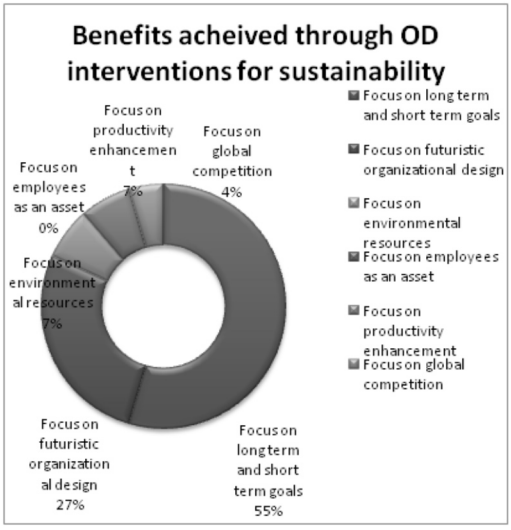


Graph.no.: 6.1.3

Observation: It is observed that majority of the respondents feel that there is improvement in social, technical and human processes in an organization through OD interventions. The social processes denotes interpersonal relations, technical processes is about technological and process orientation and human processes is about behavioral reinforcement in employees with implementation of OD interventions in an organization.

Graph.no.6.1.4:

Observation: 73 % of the respondents agree that organizational change is managed effectively through implementation of OD interventions. The OD interventions range from individual, team and intergroup and organization wide interventions which make them holistic and then helps the organization to manage the change at each level. The OD approach thus helps to manage the change at all levels and thus helps in sustainability.


Benefits acheived through OD interventions for sustainability
Focus on productivity enhancement 7%
Focus on global competition 4%
Focus on employees as an asset 0%
Focus on environmental resources 7%
Focus on futuristic organizational design 27%
Focus on long term and short term goals 55%
Focus on long term and short term goals
Focus on futuristic organizational design
Focus on environmental resources
Focus on employees as an asset
Focus on productivity enhancement
Focus on global competition

Graph.no.6.1.5

Observation: The majority of the respondents feel that OD interventions have helped in focusing on long term and short term goals. The OD interventions have also helped in focus on futuristic organizational design. This highlights that the OD interventions have helped in achieving goals and in sustainability through focus on new and modern organizational designs for future.

Hypothesis Testing :

Null Hypothesis H0:

OD interventions have helped for managing organizational change effectively is independent of each other.

Alternative Hypothesis H1 :

OD interventions have helped for managing organizational change effectively is not independent of each other.

Chi-Square Tests

	Chi-Square Value	df	P-Value
Pearson Chi-Square	12.227	3	.007

Observation: P-value is less than 0.05 (5% level of significance) Hence we reject null hypothesis.

Conclusion:

OD interventions have helped for managing organizational change effectively is not independent of each other i.e Organizational change and OD interventions are dependent on each other and thus ODI helps in managing change.

Recommendations:

1. A force field analysis for initiating change efforts as it is used to analyze the driving and restraining forces.
2. Based on the force field analysis the specific change efforts and OD interventions appropriate to it can be focused.
3. The role of top management and vision for change needs to be carefully established for better success.
4. The individual interventions were found less in some organizations so the implementation of OD interventions like mentoring, counseling can be of more utility.
5. Team building initiatives through team building exercises and workshops need to carry out more so that effective teams are formed.
6. Intergroup interventions which are concerned with intergroup relations need to be focused more through conflict management and confrontation interventions.
7. Organization wide interventions which are carried out are restricted with traditional approaches but can be extended to talent management, knowledge management, six sigma and business process reengineering to name few.

The appropriate model for implementing OD interventions is recommended by researcher as follows:

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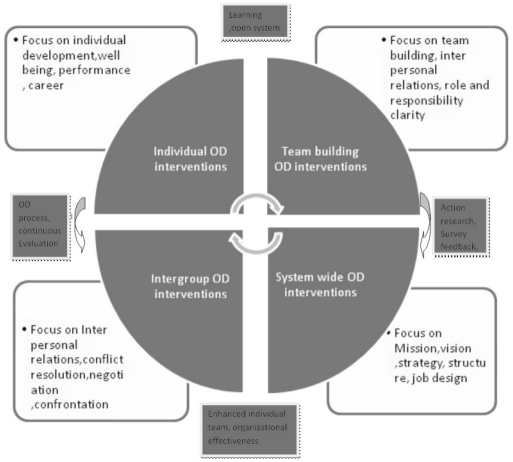
Learning ,open system
• Focus on individual development,well being, performance , career
• Focus on team building, inter personal relations, role and responsibility clarity
Individual OD interventions
Team building OD interventions
OD process, continuous Evaluation
Action research, Survey feedback,
Intergroup OD interventions
System wide OD interventions
• Focus on Inter personal relations,conflict resolution,negotiation ,confrontation
• Focus on Mission,vision ,strategy, structure, job design
Enhanced individual team, organizational effectiveness

Fig.no.1: An appropriate model of OD interventions source: research

The appropriate model is basically about an organization which is an open system and which believes in continuous learning for sustainability. The continuous nature of change enables an organization to decide on appropriate interventions focusing on an individual, team, and inter group and system together. No intervention can work in isolation if as all systems are interdependent in an organization. The appropriate model aims at individual, team and organizational effectiveness as illustrated in the above figure.

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A Study of Job Opportunities and Challenges for Retired Indian Air Force Personnel for their Resettlements

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Abstract:

The role of Indian Air Force is to safeguard the Indian territory and to secure Indian air space. Indian Air Force which is responsible to secure the airspace, presently has a strength of 127,000 active personnel1. A major portion of this is Airmen (Combat armed force of Indian Air Force, below the officer rank). After joining Air Force they contributed their whole youth in the defence service. A large numbers of defence personnel are retiring every year after their initial term of engagement (bond). The average age of the retiring people is in between 40 to 46. They all have liabilities to their family. Almost everyone is married and their children are studying even for higher education. They are in search of Job soon after their retirement and also need support from the government for their re-settlement. Only few percentages out of them are placed for job in various sectors. But still many are jobless. In that case they are fully dependent on their pension. Some cases they are compromising themselves to do substandard job.

Key Words: *Defence, Air Force, Job opportunities, Challenges, Resettlements, Government*

Introduction:

The role of Indian Air Force is to safeguard the Indian territory and to secure Indian air space. Indian Air Force which is responsible to secure the airspace, presently has a strength of 127,000 active personnel1. A major portion of this is Airmen (Combat armed force of Indian Air Force, below the officer rank). A huge number of Airmen retire every year voluntarily. They are in search of Job soon after their retirement and also need support from the government for their re-settlement.

In Indian Air Force for selection, the age of the candidate should be in between 17 to 21 years2. After joining Air Force they contributed their whole youth in the defence service. After completion of their initial engagement of 20 years when they want to lead a settled life with their families, they could realise that a huge gap has already created between the defence and civil life.

The purpose of this study is to analyse various causes of leaving the job, by the Air Force personnel after completion of their initial engagement and before the retirement age; the job opportunities available for them by considering their age, qualification and experiences; the challenges what they are facing on job search and also to find out the various initiative that organization is taking

 ISBN: 978-81-910118-7-6

for their resettlements. The purpose is also to find out the gap between the expectation of ex-servicemen for their rehabilitation and the government initiative for the same.

Need for the Study:

There are huge numbers of defence personnel retiring every year. Out of this the majority are the personnel below officer rank. In Indian Air Force a huge number of Airmen leaving the service for various reasons just after completion of their initial bond (term of engagement). The need of the study is vivid and important and few points are stated for that.

a) Government recruit the armed force personnel (Airmen) at the early age of their life

b) There is a huge requirement of the young force due to the nature of work

c) Nature of work is very specific to the requirement of the defence organizations.

Thus there is a need for their re-settlement, the responsibility belongs to the government to open a door step which will help ex- servicemen to adjust themselves and to get an opportunity for rehabilitation.

Objectives of the Study:

a) To study the Job search strategies of IAF Ex-servicemen

b) To study the possible opportunities of employment in present scenario for the ex-servicemen specially in government sector and PSUs.

c) To understand the challenges faced by the retired IAF personnel for re-settlement.

Scope of the Study:

a) There are three forces come under the defence service and only Indian Air Force is focused.

b) The Scope of the Study is limited to those personnel who are combatant and below the officer rank.

c) Indian Air Force is a huge organization. The study could possible at a very large extent.

d) Sample size is only 30

Research Methodology:

i) Qualitative technique:

   a) The themes and sub themes are discussed with the respondents

   b) In depth interview method researchers are tried to find out the issues are related to effort taken for their re-settelments.

   c) All the questions are open ended

A generalize idea has come out from the in depth interview and through focus group method. The result of this is very much useful to generate the questioner for the second phase of data collection. The next state is quantitative techniques and the data is being collected through valid questionnaire.

ii) Quantitative techniques:

Primary data is collected through questioners framed on 5 point Likert scale based on the outcome of qualitative study.

Survey:

In this research,

i) All the respondents are served defence services atleast for 20 years.

ii) They are either retired recently or going to retire within few months.

iii) They all are married and having liabilities to their families.

iv) They are the only earning member in their family.

A survey is carried out amongst a group of 30 respondents (defence personnel). Their views' regarding the topic is gathered through in depth interview as well through structured questionnaire. The validation of the questionnaire framed for quantitative techniques. The outcomes from the survey are as follows.

Findings and analysis:

A pilot survey is being carried out together general information and for the validation of the questionnaire framed for quantitative techniques. The outcome from the pilot survey are as follows.

Findings from quantitative study:

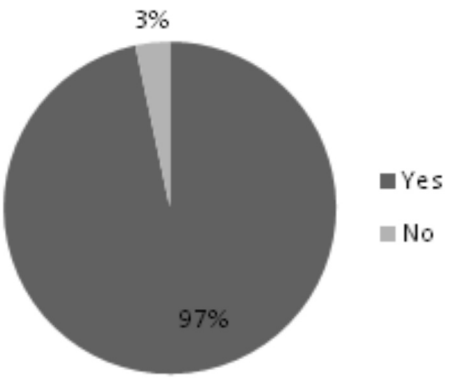
On this research the statistical tools used through SPSS are Cronbach alpha, correlation, ANOVA (single factor). Measurement scale is a measuring instrument used to measure the record collected through questionnaires to test the characteristics of various parameters. In this research, questionnaires are framed on 5 point likert's scale.

i) Reliability test:

For reliability of the questionnaire the Cronbach alpha test is being carried out to measure the internal consistency of the questionnaire . The value of the coefficient found out by using SPSS (statistical tool) directly or by using the formula $= rk /[1 + (k -1)r]$, where 'k' is the number of iterations and 'r' is the mean value of the inter-item correlations.

Analysis: The alpha value obtained in all the cases is more than 0.7, that indicates the questionnaires are reliable and consistence.

ii) Want to do a job after retirement?



Analysis: 97% respondents said they want to do a job after retiring from defence service. Only 3% of the respondents said they don't want to do job any more, and they want to engage themselves in business.

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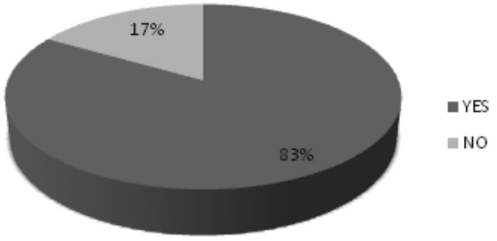
iii) Registered or will register name after retirement in Zela Sainik Board.

Zela Sainik Board is an organization, help ex-servicemen for getting a job after their retirement. They inform ex-servicemen according to vacancy on any post when exists.

Analysis: 100 % respondents said yes, it also proves that it is mandatory to register themselves in Zela Sainik Board.

iv) Will you register your name in Employment Exchange?



Analysis: 83% respondents said they want to register their name in employment exchange. Only 17% of the respondents said they don't want to register.

Researcher analysed in depth and found that most of the respondents not want to register their name in employment exchange are aged more than 50. It will not be wrong to state that their expectation of getting a govt. job is very less.

Findings from qualitative study:

Theme 1: Job search strategies of Ex-servicemen:

Analysis: Under this theme there are 8 sub themes on which data is collected for the respondents. The mean of the mean of all sub themes is 3.07 and the standard deviation is 0.94. This indicates that ex-servicemen are adopting various job search technique and the deviation of various data from the mean is also less.

Theme 2: Defence organisation taking initiative for Personality development of the defence personnel given unwillingness for further extension of service:

Analysis: Under this theme there are 5 sub themes on which data is collected for the respondents. The mean of the mean of all sub themes is 2.42 and the standard deviation is 0.97. This indicates that defence organization is not taking adequate initiative for Personality development of the defence personnel given unwillingness for further extension of service. The deviation of various data from the mean is also less.

Theme 3: Initiative taken by the Govt., Ministry of Defence and Organisation for Rehabilitation:

Analysis: Under this theme there are 5 sub themes on which data is collected for the respondents. The mean of the mean of all sub themes is 2.57 and the standard deviation is 0.73. This indicates that government, Ministry of Defence and defence organization are not taking adequate initiative for the resettlement of defence personnel after their retirement. The deviation of various data from the mean is also less, which indicates that the opinion of all the respondent are not deviating highly.

Theme 4: Scope for acquiring Civil Educational Qualification while in service and Organisational support:

Analysis: Under this theme there are

4 sub themes on which data is collected for the respondents. The mean of the mean of all sub themes is 1.83 and the standard deviation is 0.78. This indicates that defence organization is not encouraging or not giving any opportunity or privilege to defence personnel. Educational qualification i.e. degree from recognized university is definitely going to help defence personnel to get a better job after their retirement. The deviation of various data from the mean is also less, which indicates that the opinion of all the respondent are not deviating highly.

Note: Through in depth interview it is found that defence organization (Army/ Nevy/ Air Force) give this facility to enhance civil qualification to officers only, they don't extend this facility to personnel below officers rank.

This is also valid information which is gathered through in-depth interview that the officers are getting allowances for their educational qualification but again it is not applicable for personnel below officers rank.

Theme 5: Initiative taken by you for Self Preparation for written examination and interview, for getting a job.

Analysis: Under this theme there are 5 sub themes on which data is collected for the respondents. The mean of the mean of all sub themes is 3.57 and the standard deviation is 1.01. This indicates that defence personnel take various initiative on self preparation for written examination and interview, for getting a job after their retirement. The deviation of various data from the mean is bit higher, which indicates that the method of preparation for getting job for their resettlement for the respondent are not same. There is a slight difference on the method of preparation for getting a job after their retirement.

Conclusion:

The most common methods adopted by those respondents (defence personnel) searching through internet for the job opportunities available. Most of the defence personnel are preparing themselves to face interview and aptitude test by enhancing their general knowledge by reading news paper and latest happening through internet. They are lagging behind on soft skills as confirmed from the open ended questions.

Almost everyone is graduate and few are post –graduate in various discipline, besides their long experience either in technical or administrative or both. Thus they have certain expectation for getting a job after their retirement. But in practical the job opportunities are available for them are in the line of security like security guard, security in-charge, security officer in private organization etc.

Some of the respondents are also taking effort in walk-in-interviews. Thus in conclusion it is suggested that they should prepare themselves to face the challenges in the present secnerio and the competition is going to be very hard and the competitors are young and well equipped with general knowledge and communication skills. There should be more initiative from the government and the MOD (Ministry of

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Defence). There should be atleast some job openings for those who have completed masters in various fields.

Regarding govt. initiative for the resettlement of the defence personel below officers rank, government and Ministry of Defence should take the initiative to amend the policy so that personnel below officers rank also should get the facility to enhance their educational qualification from various universities and there should be allowances applicable as applicable for the defence officers. By this not only going to encourage to personnel below officers rank to enhance their educational qualification but also will help on resettlement after their retirement.

Finally we can say though the ex-servicemen are taking much effort to get a suitable job after their retirement and government are also taking initiative by offering pre-realize course (although not mandatory and every body is also not getting the opportunity), keeping ex-servicemen quota for few govt. and PSU jobs etc. but still there is a significant gap between the expectation of the ex-servicemen and government initiative, for getting a job after their retirement for their resettlement.

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Training Needs Analysis (TNA): An Empirical Study at NCPIL

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Abstract:

The significance and value of training has long been recognized.Given today'sbusiness climate and the exponential growth in technology with its effect on the economy andsociety at large, the need for training is more pronounced than ever.Hence today the need of the day is to particularly improve the performance of human resources to achieve the desired level of effectiveness and to remain successful. In most of the organisations in India especially the government sectors training are not conducted in a professional manner, in terms of TNA that is nominating the trainees, implementing the programmes and evaluating the programmes. Therefore, organisations need to consider some important issues as they face thefuture; continuous technological change; the increasing removal of trade barriers; theconsequent globalisation; the volatility of customer demand within existing markets (Luoma, 2000; Ulrich, 1997). It is argued that, in order for anorganisation to achieve its objectives and goals, it needs to consider the important role of itspeople; it needs a highly competent, skilled and trained workforce.Thus this study seeks to understand the practices undertaken and the nature of the existing Training Need Analysis in NPCIL, its implication and to understand to what extent is the effectiveness of training perceived by the employees working in this organisation..

To achieve the aim of this study, questionnaires,closeobservationsandinterviews was carried out in the NPCIL. Particularly the questionnaires were divided into two various parts; one for the management to understand what practices for TNA and its implications; while one for the staff to understand how they perceived the effectiveness of training.

Key Words:

Training: *"...the acquisition of knowledge and skills for presently know tasks"*

(Lawrie, 1990, p 44, quoted in Crutchfield, 2000, p 92)

Need: *The gap or discrepancy between current performance and desired Performance*

(Altschuld, 2004; Kaufman, 1994; Watkins & Kaufman, 1996).

Needs Analysis: *The process for identifying the cause(s) of performance needs in order to select performance improvement solution(s) (Kaufman, 1994)*

Skill: *"A present, observable competence to perform a learned psychomotor act"*

(Bemis1983, p. 61)

Competency: *Knowledge, skills, attitudes, or behaviours that result in performance of a function to standard*

(Gupta, 2007)

 ISBN: 978-81-910118-7-6

Objectives of the Study:

The main aim of this research is to examine the current practices and to explore the nature of training needs analysis offered in NPCIL. Therefore, this study is specifically concerned with achieving the following research objectives:

- To understand the practices and the parameters on which Training Need Analysis is carried out and if any formal procedure or methods are undertaken for the same. Therefore, this study will try to identify the levels of TNA and the data collection methods and techniques used in each level. To develop an understanding of the political, cultural, social and technical elements relating to the implementation of TNA
- To understand what importance is Training Need analysis in a government sector like NPCIL.
- To understand the extent of the effectiveness of training perceived by the employees of NPCIL.

Statement of the Problem:

Assumed problem:

The problem that the researcher looked out for is as follows:

- Training need analysis is not carried out efficiently in NCPIL and Competency mapping and skill matrix which are used to access the training needs are not implemented.
- No proper concentration on training done in the organisation. Employees not aware about the concept of Training Ned Analysis and training given to only technical employees.
- Each and every employee in the organisation requires to be trained efficiently in order to update their skills, but no proper analysis is carried out which is posing a gap between the management and the employees regarding what training should be given to them.
- Training is mainly carried out on seniority basis which takes away the chance of the interested employees who eagerly want to get trained.

Scope of the Study:

NPCIL, a Public Sector Enterprise of Department of Atomic Energy (DAE) is entrusted with the task of nuclear power generation by the Government enterprise of India. The scope of the study was within Tarapur Atomic Power Station (1&2, 3&4) It is one of the most challenged organisations among all the public sector organisations in India. The scope of the study will basically be limited to the impact of the methods of TNA and their practices to uphold the performance of its employees. The scope of this study is limited to identifying the effectiveness of training and how it is perceived by the employees.. Thus various officials from top to bottom, as well as the employees both permanent and temporary based is within the scope of the study. The scope of the study further extended to suggest recommendations for the policy makers to implement the training needs analysis models in identifying training needs of NPCIL.

Literature Review:

Meaning of TrainingL

Definition

"Training is the act of increasing the knowledge and skill of an employee for doing a particular task"

From the above definition it is easy to understand that Training is nothing but enhancing your current kills and identifying new skills and competencies and training them for the justification of the job or task that an individual undertakes. Hence it can be said that it is a very important activity in the organisation aimed for bringing positive changes in the trainees with respect to their knowledge skills and attitude, thus enhancing the level of performance. In other words training is a continuous activity which is highly planned concentrating on the present needs of the employees in order to have a blissful future which improves employees' performance and increase productivity at work.

In this continuous changing environment Training the only solution of adding up to the knowledge and is also responsible for building skilled, qualified and capable people, which helps organisations to improve their performance and adapt to any new change. This is why some successful organisations spend a great deal on the Training and Development function; however, organizations often train more employees than necessary, or the training investment is "wasted" on the wrong employee .Often, organizations will develop and implement training without first conducting a needs analysis. These organizations run the risk of overdoing training, doing too little training or missing the point completely.). Therefore, scholars generally recognised that the first important phase in planning and developing a training programme is to determine the needs for such a programme within an organisation

Identifying of Training Needs:

The identification of the Training needs is considered to be the first and the most important step in the process of Training since without this step it is not possible to carry out the further proceedings. Training need identification answers to the questions like;

- where training is needed
- what needs to be taught
- and who needs to be trained,

Definition of TNA:

One of the clearest explanations of needs assessment is given by Anderson, who writes that the needs assessment is the starting point in the training process. It is the phase in which an organization's needs are identified, forming the foundation of an effective training effort. The needs assessment tells where and what kind of training programs are needed, who needs to be included, conditions under which training will occur, and criteria to guide program evaluation.

It is nothing but a analysis done to remove the gap between the current performance and the standard performance for the efficient working of the organisation and also to cope up with the current trends and changes.

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There are three levels of a training needs assessment:

- **Organizational assessment** evaluates the level of organizational performance. An assessment of this type will determine what skills, knowledge, and abilities an agency needs. It determines what is required to alleviate the problems and weaknesses of the agency as well as to enhance strengths and competencies, especially for Mission Critical Occupation's (MCO).
- **Individual assessment** analyzes how well an individual employee is doing a job and determines the individual's capacity to do new or different work. Individual assessment provides information on which employees need training and what kind.
- **Occupational assessment** analyzes the occupation of the individual. The skills and talent essential to fulfil the needs and given justice to the job to be performed by the individual.

Different TNA Models:

In general, training needs analysis models can be grouped into two major categories: the organisation-task-person analysis framework (referred to as the McGehee and Thayer's three-level `O-T-P' model in this research) and Mager, and Pipe's "Performance Analysis Model". The former is more popular among academicians, and many models developed by them are based on this foundation. The latter is popular among practitioners, and gaps between expected and current performance are considered as needs for training.

Furthermore, these two theoretical models of TNA have dominated the training literature for over three decades. Within the O-T-P model in particular, decisions being determined as a result of integrating macro through to micro analyses, arising from an investigation of training needs to meet organisational needs, task or job needs, through to the particular needs of the individual or person. By contrast, the performance analysis model focuses on identifying the areas of discrepancy between desired and actual performance and subsequently analysing the causes of such discrepancies. Also, compared to the performance analysis approach, the O-T-P approach tends to be more strategic to organizational missions and needs for the future are also analyzed as part of analysis (Taylor et al, 1998).

This study will use The McGehee and Thayer's three-level (Organisation-Task-Person) conception of needs assessment because it is considered the core framework for needs assessment in the academic literature and most of the models developed since have been based on this three-level framework (Holton, E. et al. 2000). Clarke (2003) also, stated that the (O-T-P) model integrated macro through to micro analysis, arising from an investigation of training needs to meet organisational needs, task or job needs, through to the particular needs of the individual or person.

Two important processes for identifying the needs are as follows:

Competency mapping is a way of assessing the strengths and weaknesses of a worker or organization. It's about identifying

a person's job skills and strengths in areas like teamwork, leadership, and decision-making. Large organizations may use some form of this technique to understand how to best use each worker or how to combine the strengths of different employees to produce the highest quality work. Individuals may also find that this type of assessment can help them prepare for a career change or advance in a specific job field.

Skills matrix is a tool used to assess training needs, also known as a competency framework. It is a table that displays all tasks and skills of individuals in an area or team; it displays all current team members and current competency/ability levels for each task thus any

Research Methodology:

The research methodology is an approach concerned with the methods or techniques used for data generation and collection when carrying out research (Oppenheim, 1992). Traditionally, research methodologies are broadly classified into two: qualitative and quantitative. Myers (2009) distinguishes that qualitative research is an in-depth study of social and cultural phenomena and focuses on text whereas quantitative research investigates general trends across population and focuses on numbers.

Type of Research:

The basis of this study is phenomenology which will adopt mainly a qualitative approach to achieve the aims and objectives. For better understanding of the set objectives, this study will also use quantitative techniques as well.

Data Source:

The research is done by collecting primary and secondary data. Primary data in the form of questionnaires, observation and interviews whereas secondary data with the help of references and the internet.

Sampling Size:

Sampling size taken in the study is 40 respondents from the staff and 13 officers from the management.

Sampling Techniques:

There are two sample techniques.They are probability sampling and non-probability sampling.In this study,the research has adopted convenient sampling.

Limitation of the Study:

- Lack of co-operation from the staff.
- Limited number of sample size.
- Research was restricted to a limited area.
- Conservative nature of some of the respondents.

Analysis: Analysis of the questionnaire for staff

3.1 Table showing number of training's attended by the employee in the last five years.

Basis	No. Of respondents	Percentage
Five and above	1	2.5%
One to five	28	70%
None	11	27.5%
Total	40	100%

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Interpretation: The above chart shows that 70% respondents have attended trainings between "one to five" in the last 5 years, and 2.55% of the employees have attended training between "five and above" while 27.5% of the employees have not attended any training at all. From the researcher's observation the employees are eager to attend the training but they are not given a chance to attend the training.

3.2 Table showing the most effective way of conducting training according to you.

Basis	No. Of Respondents	Percentage
Off The Job	9	22.5%
On The Job	31	77.5%
Total	40	100%

Interpretation: 77.5% respondents prefer on the job training, whereas 22.50% of the respondents opted for off the job training. The employees preferred on the job training since they wanted to save time and acquire training on all their job related purpose.

3.3 Table showing what should be the basis of nomination for training.

Basis	No. Of respondents	Percentage
Seniority basis	11	27.5%
Functional basis	29	72.5%
Total	40	100%

Interpretation: 72.5% respondents think training should be given on functional basis. These respondents mainly composed of the newly recruited employees who wanted to be nominated for training. 27.5% of the respondents said that it should be done on seniority basis.

3.4 Table showing suggestions for the areas for training.

Interetation: With respect to the responses obtained from the 40 respondents regarding suggestion for training areas,analysis shows that training in the following areas has been suggested for implementation.

- Training on work procedures
- Training on how to develop personality
- Training to attain better communication skills
- Training on HR procedures and rules
- Training on taxation(IFRS)
- Motivational training
- Training based on system updating with respect to the changing technology.
- Training on computers(word,excel)

3.5 Table showingwhether the competencies of the employees aredefined.

Basis	No of respondents	Percentage
Yes	26	65%
No	14	35%
Total	40	100%

Interpretation: 65% of the employees say that their competencies are defined, whereas 35% of the employees said that their competencies are not defined.

3.6 Table Showing GOALS/OBJECTIVES for future.

Basis of comparison	No. Of respondents	Percentage
With goals & objectives	14	35%
Without goals & objectives	26	65%
Total	40	100%

Intrepretation: 65% of the employees had no goals and objectives set for themselves. With lack of goals and objectives it is very difficult for the employees to enjoy what they work. Hence motivational training is a mandatory need for the organisation. It would help to develop competition in the organisation which would strive them to work much harder and achieve the organisation's goals.

3.7 Table Showing if competency mapping and skill matrix be methods implemented for analysing training needs?

Responses	No of respondents	Percentage
Yes	37	92.5%
No	3	7.5%
Total	40	100%

Interpretation: 92.5% of the respondents opine that competency mapping and skill matrix should be the implemented.7.50% respondents were against the implementation of these methods. The employees are not aware about these two methods however after knowing the importance of these methods they were ready for its implementation.

3.8 Table showing do you think training is biased in any way?

Responses	No. Of respondents	Percentage
Yes	24	60%
No	15	37.5%
Can't say	1	2.5%
TOTAL	40	100%

Interpretation: 60% think that training is biased while 37.5% of the employees do not think that training is biased. From the researcher's observation it was seen that the employees were cold and were not open while answering to this question.

3.9 Table showing is training helpful in improving the performance of the employees?

Responses	No. Of respondents	Percentage
Yes	40	100%
No	0	0%
Total	40	100%

Interpretation: All the 40 respondents think that training is very essential for improving the performance of the employees.

3.10 Tableshowing what is the employees satisfaction level regarding Training?

Basis	No of respondents	Percentage
Highly satisfied	10	25%
Satisfied	10	25%
Dissatisfied	20	50%
Total	40	100%

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Interpretation: 50% of the employees say that they are not satisfied with the training. The training provided to the employees was not related to their job which built dissatisfaction among them. Each of the 25% of the respondents said that they were satisfied and highly satisfied with training.

3.11 Table showing what is the level of motivation for pursuing training?

Basis	No of respondents	percentage
Highly motivated	9	22.5%
Motivated	31	77.5%
demotivated	0	0%
Total	40	100%

Interpretation: 77.5% of the employees are motivated for pursuing training whereas 22.5% of the employees are highly motivated. No employee is demotivated for pursuing training. The employees are eager for pursuing training; however the major drawback is that they are not given a chance for training

Analysis: Analysis of the questionnaire for management

4.1 Table showingwhether training need analysis done in your organisation?

Responses	No. Of respondents	Percentage
Yes	10	76.9%
No	2	15.3%
Not aware	1	7.6%
Total	13	100%

Interpretation: According to 76.9% respondents,Training Need Analysis is done in the organisation.15.3% of the employees said that training need analysis is not done in the organisation, these employees were mainly of the finance section who were not aware about of the functioning of training need analysis done in the organisation.

4.2 Tableshowinghow often is training need analysis done?

Basis	Responses	Percentage
Monthly	0	0%
Quarterly	1	7.6%
Half yearly	2	15.3%
Annually	7	53.8%
NA	3	23.0%
Total	13	100%

Interpretation: 53.8% respondents say that training need analysis is carried out on annual basis, however 23% of them are not aware about it. However through the researcher's finding's it is seen that training need analysis is carried out annually in the organisation.

4.3 Table showinghow Training Need Analysis is conducted in your organisation?

Interpretation: From the responses received from the 13 respondent's analysis shows that Training Need Analysis is basically carried out through observations,self requisition forms,job analysis. However many of the respondents are not aware of how it is exactly conducted.

4.4 Table showing in the past two years has the organisation changed the way they conduct the Training Need Analysis?

Responses	No. Of respondents	Percentage
Yes	3	23.0%
No	5	38.4%
NA	5	38.4%
Total	13	100%

Interpretation: 38.4% respondents are not aware about the functioning of TNA in the organisation as well as any changes related to it. While 38.4% respondents feel that no changes have been implemented.

4.5 Table showing indicate how effective each of the following factors are for the Training Need Analysis process?

Basis	Somewhat effective	effective	Not applicable
Company goals & objectives	7.6%	100%	0%
Manpower inventory	15.3%	92.3%	0%
Skill inventory	0%	100%	7.6%
Organisation climate	15.3%	92.3%	0%
Analysis of efficiency indices	7.6%	84.6%	7.6%
Changes in system	38.4%	69.2%	0%
Mgt request or interrogation	45.1%	61.5%	0%
Exit interviews	23.08%	53.8%	30.7%
MBO	7.6%	92.3%	0%

Interpretation: Company goals and objectives is most effective and important factor in the training need analysis process followed by skill inventory.

4.6 Table showing who initiates Training Need Analysis in your organisation?

Responses	No. Of respondents	Per-centage
Training department	8	61.5%
Supervisor	3	23.07%
NA	2	15.3%
Total	13	100%

Interpretation: The TRAINING DEPARTMENT plays the most important role in taking the initiative for the training need analysis.

4.7 Table showing whether the following operational data are used for Training Need Analysis?

(Mark 1. If used, 2:If it is not used,3:If the practice will be used shortly)

Basis	Is used	Not used	Will be used shortly
Job description	69.2%	7.6%	0%
Job specification	61.5%	15.3%	0%
Performance standard	38.4%	30.7%	7.6%
Performance on the job	38.4%	30.7%	7.6%
Perception of the job by the job holder	53.8%	30.7%	0%
Perception of the job by the supervisor	53.8%	23%	0%
Perception of job by management	53.8%	23%	0%
Input from training committees	38.4%	30.7%	7.6%

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Interpretation: From the above data the percentage of the various operational data used for training need analysis is mentioned, where Job Description and Job Specification is given the highest importance in the process according to the statistics. Performance standard, Performance on the job, Input from training committees will be shortly been put in use.

Findings:

As per the analysis of the research done I have identified some important points regarding the training need. These points are identified when all the related questions from the analysis part were analyzed collectively

- 70% respondents have attended trainings between "one to five" in the last 5 years, and 2.55% of the employees have attended training between "five and above" while 27.5% of the employees have not attended any training at all. From the researcher's observation the employees are eager to attend the training but they are not given a chance.
- 77.5% respondents prefer on the job training, whereas 22.50% of the respondents opted for off the job training. The employees preferred on the job training since they wanted to save time and acquire training on all their job related purpose.
- 72.5% respondents think training should be given on functional basis. These respondents mainly composed of the newly recruited employees who wanted to be nominated for training. 27.5% of the respondents said that it should be done on seniority basis. From the researchers observation training was given highly on seniority basis without any fixed purpose.
- 65% of the employees say that their competencies are defined, whereas 35% of the employees said that their competencies are not defined.
- 65% of the employees got no goals and objectives. With lack of goals and objectives it is very difficult for the employees to enjoy what they work. Hence motivational training is a mandatory need for the organisation. It would help to develop competition in the organisation which would strive them to work much harder and achieve the organisation's goals.
- 92.5% say yes for the implementation of the above two methods.7.50% reject the implementation of these methods. The employees are not aware about these two methods however after knowing the importance of these methods they were ready for its implementation.
- 60% think that training is biased while 37.5% of the employees do not think that training is biased. From the researcher's observation it was seen that the employees were cold and were not open while answering to this question.
- All the 40 respondents think that training is very essential for improving the performance of the employees.

- 50% of the employees say that they are not satisfied with the training. The training provided to the employees was not related to their job which built dissatisfaction among them. Each of the 25% of the respondents said that they were satisfied and highly satisfied with training
- 77.5% of the employees are motivated for pursing training whereas 22.5% of the employees are highly motivated. No employee is demotivated for pursing training. The employees are eager for pursuing training; however the major drawback is that they are not given a chance.
- According to 76.9% Training Need Analysis is done in the organisation.15.3% of the employees said that training need analysis is not done in the organisation, these employees were mainly of the finance section who were not aware about of the functioning of training need analysis done in the organisation.
- 53.8% respondents say that training need analysis is carried out on annual basis, however 23% of them are not aware about it. However through the researcher's finding's it is seen that training need analysis is carried out annually in the organisation.
- From the responses received from the 13 respondent's analysis shows that Training Need Analysis is basically carried out through observations, self requisition forms, job analysis. However many of the respondents are not aware of how it is exactly conducted.
- 38.4% respondents are not aware about the functioning of TNA in the organisation as well as any changes related to it. While 38.4% respondents feel that no changes have been implemented
- Company goals and objectives are most effective in the training need analysis process followed by skill inventory.
- The TRAINING DEPARTMENT plays the most important role in taking the initiative for the training need analysis.
- According to the responses four of the respondents are not aware if any changes are made while three respondents say that no changes have been made. However few changes have been made with further additions in the system
- Late deliveries and Quality control are the two major problems that determine Training need analysis according to the respondents.

Recommendations:

- The company should give more importance to Training Need Analysis and should be strictly implemented and followed. A particular model of TNA should be undertaken along with proper techniques or methods to carry out TNA efficiently.
- The company should look into enhancing the profile of an employee

 ISBN: 978-81-910118-7-6

by providing them various training so as to enhance and update the skills of the employees.The company should try emphasizing on the aftermaths of Training Need Analysis to motivate the employees.

- KSA i.e. the Knowledge skills and abilities of the employees should be determined and their potential should be established.
- The motive for Training Need Analysis should be fulfilled.Training Need Analysis should be made aware to each and every employee in the organisation irrespective of the sections in which they work.
- Analysis should be carried out often and more training programs should be undertaken.
- There is no proper implementation of training. Some actions should be taken for the implementation of training given to them.

Conclusion:

TNA is the first critical stage in any training cycle. Thus, a TNA is quite simply a way of identifying the existing gaps in the knowledge and the strengths and weaknesses in the processes that enable or hinder effective training programs being delivered. It is very clear from the above findings that the employees working under this organisation are keen to undergo training and also many areas need strong and enhanced improvement with respect to the level at which the goals of the organisation are set. The practices undertaken has no scope defined and has no direction or any aim. From the recommendations given above it is essential that a coordinated approach is undertaken by following a appropriate TNA model along with a process. Due consideration should be given to the employees of the organisation since they are the ones who need to be trained. Training should not be taken for granted and utmost importance should be given to this activity without being biased.

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A Study of Training Practices of Expatriates in Relocation : A Case Study Approach

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Abstract:

Organizations are increasingly seeking business opportunities in foreign countries. As a result of this trend, human resource professionals in international firms are faced with the pressing issue of selection, preparation, communication whilst offshore and repatriation while still managing the careers of international employees. The internationalization of business has resulted in the increasing use of expatriates by organizations to fulfill a variety of functions in their offshore operations. This paper focuses upon the three distinct and important phases of expatriate assignment: pre-departure, during assignment and repatriation. The major focus is on the pre-departure phase because most of causes for the expatriate failure are mostly preventable. It attempts to study the challenges expatriates face during and after their assignments. It also studies the challenges, assignments and roles of expatriates as well as how they are trained.. Organizational support can play a big role in making a successful international relocation (Kraimer et al., 2001) especially during the pre-departure phase as most causes for failure are still preventable. The study is based on secondary data i.e. referring various research papers and articles.

Key Words: *Expatriates, training, repatriation*

Introduction:

There are many people who have different reasons for moving to foreign lands. Some people opt for working there, others to seek adventure. As the world is becoming smaller all the time due to globalization the importance of international assignment also grows. This has made it possible for the work force to move more freely across national borders in order for the company to be as sufficient as possible. Many companies today operate in different countries. Commercially, as market boundaries across the world continue to dissolve, it has become increasingly common for organizations to move into new foreign markets. In order to expand globally, employees are often required to work around the world away from their country of origin, and they represent a potential competitive edge for the success of global corporations. But these overseas assignments are usually very challenging for the employees involved, and unfortunately, incidents of employees falling short of company expectations are rather common, and can cause tremendous losses for the organization (Pires et al., 2006). Despite the demanding tasks and high failure rate associated with international assignment,

 ISBN: 978-81-910118-7-6

global corporations are still showing no sign of slowing down because of increasing foreign revenues (Bruning& McCaughey, 2005); and employees are still raising hands to take on international assignments for the advantages offered by the overseas experience(Global Relocation Services, 2005)

Defining Expatriates:

A MNC can deploy two types of human resources to top managerial positions in its foreign operations – expatriates and local hires. "An expatriate is a highly skilled worker with unique expertise who is sent to work in another unit of the same company located in a foreign country, generally on a temporary basis" (Romero, 2002). "On the other hand, local hires are host country employees" (Daniels and Radebaugh,2001). Expatriates are professional who on a temporary basis live in an outside country usually for more than a year. Apart from monitoring and controlling an expatriate is expected to extend their knowledge and skills in technology transfer (Shephard 1996). The role of expatriates is considered significant since the main task is to act upon maintaining the structure of the MNC while following the rules and regulations of work within the host country. The need to 'export' managerial personnel across the globe is because of the internationalization of the business (Bamber and Lansbury, 1987).

There are many opportunities and challenges of global business that create need for expatriates. For instance, in order to overcome the lack of qualified, companies in China rely on skilled workers from other countries (Kaye & Taylor, 1997), or organizations often provide international experience to talented managers for career developmental purposes (Mendenhall et a., 1987). Other strategic reasons include transmitting organizational culture, transferring knowledge, improving coordination and functional needs of control, and developing global skills (Bennet et al., 2000; Jan et al., 1994; Tung, 1982; Bolino, 2007).

Literature Review:

There are many reasons for using expatriates. The typical roles expatriates may have are agent of direct control, agent of socializing, network builder, transferor of competence and knowledge, boundary spanner and language node. (Dowling;Welch; & Schuler, 2008, s. 92) Using staff transfers as bureaucratic control mechanism can be done to ensure compliance with direct supervision. This can be seen as reflection of dominance. The dominance refers to an ethnocentric approach but can be important in ensuring subsidiary compliance. (Dowling;Welch;& Schuler, 2008, s. 93)

Using an expat as an agent of socialization is linked to informal control mechanism. It is expected that the expatriate assists in transferring the shared values and beliefs. Empirical studies have shown that attempts to imbed the corporate norms and values have negative effects in foreign subsidiaries.

Despite this sharing knowledge, transferring competence and encouraging

common practices for work are assisted by international assignments. This can happen because of exposure to different views and perspectives. Time in the parent company might help employees to understand and appreciate the different practices and reasons behind them. (Dowling;Welch;& Schuler, 2008, s.

Because the international assignments can be seen as a way of developing social capital expatriates can be sent to build networks. Interpersonal linkages should be fostered in order to use them for informal control and communication purposes. Moving between different organizational units changes employees' personal network. Utilizing this asset depends on the person because people have different ways of viewing and protecting their networks. They have to evaluate the risks that can result from inappropriate usage of the connection. Even though people are introduced to each other beneficial network is not guaranteed. Time spent on international assignment factors to this. During short-term visits the network created is not as wide range. (Dowling;Welch;& Schuler, 2008, ss. 93-94)

Expatriates are can be used as boundary spanners because they can gather information of the host-country, represent their company in the host-country and influence agents. For example if the expatriate attends a social gathering at a foreign embassy he can network, gather market information and promote his company at the same time. (Dowling;Welch;& Schuler, 2008, s. 94)

If an expatriate has worked in a country and learned the language well he can be a language node upon repatriation. For example is the person was in France and learned the language he could be known in the company as "the guy who speaks French" and handle all the operations that are conducted in French. The clients would get information in French and the information needed could be translated easily for both the customer and the company. (Dowling;Welch;& Schuler, 2008, s. 94) Transferring competence and knowledge is present in all of the roles that are mentioned. There are many aspects that might affect the effectiveness of the transfer. These factors include creating an open and supporting environment productive interaction of ideas and implementing "best practice", information travelling between the expatriate, host country and expatriate's home country, strategic approach to personal networking, duration of the assignment and expatriate's abilities and motivation. (Dowling;Welch;& Schuler, 2008, ss. 94-95)

Objectives:

1. To study the practices involved pre-departure, during assignment of expatriates and issues of repatriates in Company A.
2. To examine the issues and challenges faced by expatriates.

Expatriation:

There are three phases of expatriation: pre-departure, during assignment, andrepatriation. In the following sections, I will describe their definitions accordinglyand

 ISBN: 978-81-910118-7-6

emphasize the pre-departure period as most of causes for the expatriate failure arestill preventable by the company.

I. Pre-Departure:

Pre-departure period includes all the elements need to be considered, and theactions that company A takes to enhance an expatriate's ability to adjust and copingskills before the actual departure to the host location. There are 6 chief pre-departurestages in an employee's expatriate experience.

1. Willingness to Serve Overseas

Willingness to serve overseas is the readiness of employee's mind to relocategeographically to take on an overseas assignment for a period of time, and this degreeof willingness to serve overseas acts as the central foundation that supports all otherfactors of expatriate success.Due to the background of company A and its industry, it is rather frequent to hearskilled and qualified employees have the opportunity to work and live abroad. Incompany A, the first process of expatriation starts when employees fill out a jobapplication when they apply to join the company initially. In the job applicationform, company A asks the applicants if they are willing to relocate internationally andthe preferred location. By doing so, company can identify an applicant's interestfor overseas assignment, and since expatriation is a common feature for aninternational company, this may also be a good way of selecting employees too.

After joining the company, every employee is required to fill out a LeadershipDevelopment Employee Profile at the beginning of each year. In the profile,employees not only fill in or update important information such as keyaccomplishments in the company, position history, career interest, education, andlanguage, but also the "willingness to relocate in the next 12 months." Then, thisprofile is immediately reviewed by the supervisor, and used as a way to identify, forselection purpose, an employee's interest in accepting a foreign assignment.

The reasons for not wanting to relocate in the company are mostly family-relatedissues, such as spouse career or children's education, as well as, reluctance to go tolocations where the standard of living is lower than home country. A study has alsofound that an employee's desire to serve overseas is important to expatriate successand can later become either a criterion for expatriate selection or a cause of expatriatefailure (Stone, 1991).

2. Consistency in Foreign Assignments Policy

Global consistency is the International Service Global Policy which describescompany overseas relocation practices and processes, and set up well-defined,standardized processes for expatriate practices in the company.

In order to illustrate the company's practices and procedures for expatriates,company A has an International Service Global Policy that is written with theexpatriate in mind. This applies to all the company's expatriates around the world toensure global consistency in the

administration of expatriates. This policy highlightsfactors to consider when deciding whether or not to accept the assignment, tasks thatneed to be completed before departure, practices and procedures that affectingexpatriates during assignments. Other key issues included are reimbursement andexpense procedures, compensation packages and benefits, supports upon thecompletion of assignment, and most importantly, where to find organizationala ssistance.

3. Expatriate Selection

When expatriates are on foreign assignments, in addition to daily work, they canbe under a lot of stress due to all forms of work role transitions (Aryee& Stone, 1996),differences in things as language, cultural, values, and expectations (Shin et al., 2007).As result, company A is extremely cautious in selecting the right expatriates for theright positions and at the right locations.

Opportunity to work abroad at company A is initiated in two ways. One startswith an offer from a foreign country to the divisional headquarters when there is aneed for a qualified expatriate. Another starts with a request from a local country todivisional headquarters to work as an expatriate in another country. When there is anopening for a foreign assignment, here are the steps in selecting the best candidate:

1. A Personal Development Committee will be held between human resources staffand associated departmental staff to nominate the most suitable employee for theassignment, based on the job description of the assignment. The nominatedemployee is mostly the one who has been with the company for at least 3 years,after he or she has acquired enough knowledge about the company
2. The committee members will select the best candidate for interview based on thecandidate's accomplishments in the company, willingness to relocate, language,performance review, and recommendation from his or her supervisor. Althoughfamily issues play a crucial role in the expatriates' success, company A does notattempt to include family into the criteria, but leaves the decision up to theexpatriate.
3. After the candidate is chosen, the overseas operation will make the final decisionbased on the telephone interview with the candidate.Other than the current criteria for selection used by company A, there are manyother skills necessary for successful performance in foreign assignments. Here iswhat scholars have put together as the way to select an expatriate which may improvecompany A's success rate.

First, according to Stone (1991), here are the ten selection criteria for expatriates: ability to adapt, technical competence, spouse and family adaptability; human relationskills, desire to serve overseas, previous overseas experience, understanding of thehost country culture, academic qualifications, knowledge of the language of the hostcountry, and understanding of the

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home country culture. Generally speaking, thesecriteria all represent the important causes of expatriate success, and can be the firststep in broadening the qualified pool of candidates for further selection in company A.Second, the study Huang et al., (2005) has found that extroversion, openness toexperience, and agreeableness in Big Five personality has a significant relationshipwith expatriate adjustment. It is therefore suggested that personality can be includedas selecting criteria, and company A can do so by a personality test or in-depthinterview. However, company A should be particularly cautious when selectingexpatriates for different countries or cultural backgrounds, because the rightpersonality when selecting an expatriate should be based on the host culture's mostrelevant aspects.

4. Realistic Orientation and Briefing

In company A, once an expatriate has been selected, a realistic orientation will begiven to the expatriate. The purpose of orientation is to review and to identify anyprospective issues associated with the international assignment with the potentialemployee and also very importantly, family members. The orientation is done priorto the pre-assignment trip, so a full policy is conducted and special needs areidentified.In company A, the orientation can be seen as an assessment for an employee toself-select whether or not to take the overseas job. So what company A does to assistthis assessment is to discuss the following seven issues during the orientation with theemployee and family:

1. Psychological and social considerations because both expatriation andrepatriation would require effective stress management, flexibility and adaptingto tremendous change.
2. Cost-of-living and finance as an employee's early impressions may be that thecost of living in the host country is more or less expensive when compared to thehome country.
3. Housing during the overseas assignment the expatriate and family probablyneeds to adapt to differences in space, type and the style of properties andamenities.
4. Education abroad may be very different from what the employee's childexperiences, with potential advantages or difficulties for accompanyingschool-age children.
5. Work demands may involve longer working hours and/or greater travelrequirement than at home, which may affect the family. Consideration mustalso be given to the potential inability of the expatriate's spouse to work in thehost country.
6. Leisure activities that an employee or family member has a strong interest in maynot be available at the host location.
7. Career planning during foreign assignment may create greater difficulty than athome which would require employee's close participation to coordinate with thehost office.

The intention of orientation is to give employees and their families a

betterunderstanding of some of the factors that might play a role in deciding whether or notto accept the overseas assignment, and most importantly, to make a joint decisionwhich is similar to what the study (Black & Stephens, 1989) determined. Familyissue is an important element in expatriate success. So, giving a realistic orientationcan scares away an unqualified expatriate, yet keeps the unqualified one.

5. Pre-Assignment Trip

The pre-assignment trip is the realistic job preview of the overseas assignmentthat provides the expatriate with accurate, and both appealing and less attractivejob-related information. With support from the positive relations of realistic jobpreview to employee's work adjustment and satisfaction in new settings in thedomestic context (Philips, 1998), it is expected that the pre-assignment trip will havethe same trick in the international context, as Templer et al., (2006) pointed out that arealistic job and living condition preview relates to expatriate adjustment on theassignment.After the orientation, the home office will contact the host location, and thedesignated contact for the expatriate at the host location will prepare the followingpre-assignment trip agenda accordingly:

It is recommended at company A that the pre-assignment trip includes the spousebut not children. The trip is usually 5 business days in duration, excluding traveltime. Company A is aware that in addition to knowing the working environment atthe host country, a well-planned pre-assignment trip can provide enough first-handinformation to the employee and accompanying spouse to assess the suitability of theassignment and interest. For example, one interviewee talked about the comfort thathe had received as result of his pre-assignment trip.The best thing about the pre-assignment trip is its first-hand experience, itsability to clarify my previous uncertainty…and it feels great to be able torecognize the faces I met during the pre-assignment trip on my first day of workhere.

Therefore, on returning home, the employee and spouse are able to decidewhether or not to accept the assignment, since they have acquired first-handunderstanding of the new work surroundings.

6. Cultural Training

The purpose of cultural training is to help employees deal with unpredictablematters when in the new culture (Earley, 1987). This ability to adapt to new cultureis one of the most important elements of a successful international assignment.

Currently, the cultural training in company A is only given to the employee during thepre-assignment trip, which includes factual information such as local history, policies,geography, climate, housing, schools and entertainment, and cultural orientation onlocal customs and value system.Cultural assimilation, which consists of brief installments describingintercultural encounters.

Sensitivity training that develops cultural empathy.

And finally, field experience where expatriates can undertake some of

 ISBN: 978-81-910118-7-6

theemotional stress of living and working with people of different cultures.

II. During Assignment:

A successful human resources program for expatriates does not end whenget on the airplane expatiates. Contrarily, it is only another beginning for expatriatesuccess factors. Currently, company A is experiencing varying circumstances in boththe purpose and background of expatriates.

1. Purpose of Expatriates

In company A, the purposes for sending expatriates to foreign operations varywith the expatriate's leadership level in the company (Table 3). For instance,expatriates of higher leadership levels tend to be sent "to set up or manage newoperations," whereas young expatriates in lower managerial positions who are seen bythe company as promising managers are sent mostly "to develop personal potential",and finally "to develop necessary skills" for technique-oriented expatriates.

2. Trend of Expatriate Background

One of the most notable trends in company A is the changing demographicprofile of the expatriate population. Correspondingly, other studies have also reported the increasing numberof female expatriate employees (Forster, 2000; Global Relocation Services, 2005) Incompany A, more female talented managers are being sent to overseas assignment aspart of career development, and their performance have also proven to be assuccessful as male expatriates. Similarly, many studies not only have corroboratedthe effectiveness of female expatriates, and also stated the advantages of femaleexpatriates, such as better personal characteristic in coping cross-cultural interactionsand better relationship with the local staffs (Selmer & Leung, 2003; Varmaet al.,2006).

3. Language Training

Although majority of employees in the company A speak English, but when itcomes to live and work at locations that speak entirely different languages, it becomesa big challenge for expatriates who do not speak the local languages.Company A is aware that knowledge of the local language will enable expatriatesand family members to participate more fully in the local culture and ease the culturaltransition. Therefore, if the language spoken in the host country is not the nativelanguage of the expatriate, the IS Contact at host country will arrange languageinstruction for the expatriate, spouse, and children aged five years or older. So,speaking the local language can be highly beneficial to expatriate and family.

4. Company Rewards

As mentioned earlier, overseas assignments are not only challenging, but alsocan be relatively lonely sometimes for expatriates. However, there areself-management skills for overcoming the difficult tasks, but where is the cure forbeing homesick? There is none! A sense of homesickness will not only bringdown job performance and finally cause the expatriate to quit the assignment earlythan planned, especially when 82% of the overseas assignments in the company areabout two to four years.

Home Leave enables expatriates to go home at any time during the assignmentperiod; and the number of free home leave trip is one less than the number of fullyear of the assignment. The benefit of home leave is to maintain personal contact with family and friends,as well as the home organization for career planning purposes, or simply to rechargethe mental battery for the better performance after returning to the host country.As the company revenue continue to increase at the emerging countries in Asia,more and more expatriates will be sent to locations where the standard of living islower, so company A recognizes the hardship associated with day-to-day living incertain locations, and provides the following benefit to expatriates in designatedhardship locations:Rest and Recuperation Leave allow expatriates and family members totemporarily leave the location and travel to a non-hardship location for relief.

III. Repatriation:

Repatriation is the bridge that brings expatriates home from their foreign assignments in the expatriation process, and it involves a careful career planning uponrepatriation. The overall success of expatriation is colored by the effectiveness ofrepatriation, so without repatriation support, all of the valuable development andexperiences of the expatriate will fall far away.

Career Development:

In company A, repatriation starts at about 1 month before the foreign assignmentis completed, and the Personal Development Committee will be held between humanresources staff and associated departmental staff to discuss and plan the returnedexpatriate's job. The common practices in the company is not to give expatriates toomuch of expectation that expatriation will brings them immediately to higherpositions, but as managerial developmental purposes. As result, almost allexpatriates will return to home offices and be assigned to the position comparable tothe one while on the assignments. But this fact does not scare away employees fromtaking the foreign assignment, because international experience is valued highly in thecompany and sees as a strong stepping stone, as 7 out of the current 10 departmentalheads have experiences working overseas. Stahl et al. (2002) found that 59% ofexpatriates believed that an expatriate assignment would help them advance withintheir firms, so it is important to satisfy this need by repatriation program.

There are three types of repatriation programs in company A:

1. To place the expatriate back to a similar position at home office as he or she held while on the foreign assignment.
2. To extend the current international assignment or offer opportunity to work in other countries.
3. Finally, very rarely company A will place the expatriate back to a lower position if the performance reviews during the assignment did not meet the expectation.

 ISBN: 978-81-910118-7-6

The end to expatriate success is not quite here yet, as Morgan et al. (2004)pointed out that the repatriate satisfaction is mainly influenced by the difficulty infinding a suitable position upon return. When the organization have mismanaged therepatriation process, it can affects organization's ability to attract future expatriates(Bolino, 2007), and unable to retain expatriates (Bossard& Peterson, 2005). In arecent survey, "opportunities to use international experience" and "greater choice ofposition upon return" were ranked as the top reasons for leaving the company after theassignment (Global Relocation Services, 2005).

However, this is not a concern in company A, because over past few years therewere only 2 expatriates have quitted the job after returning to home office, but both ofthem quitted for the family reasons, not unsatisfied with repatriation. For the mostpart, it is because international experience is truly valued by the company, and treatsas a necessary resource to get ahead in the company. It is similar to the findingsfrom Stroh et al. (2000), greater career implications of overseas assignments canreduce repatriate turnover rate, and increase the willingness of other employees toaccept an overseas assignment.

Therefore, a successful repatriation system needs to be loud and clear if thecompany really values international experience, just like dropping a stone into a lake,more returned expatriates move ahead quicker in company A make stronger ripples tothe shores to encourage and attract more employees wanting to take overseasassignments.

Issues & Challenges in Expatriation:

Moving to another country can be very difficult. People face many challenges upon moving to another country. Because the cultures vary a lot there are some issues that are directly connected to cultural differences. These may include ethical dilemmas or security issues.

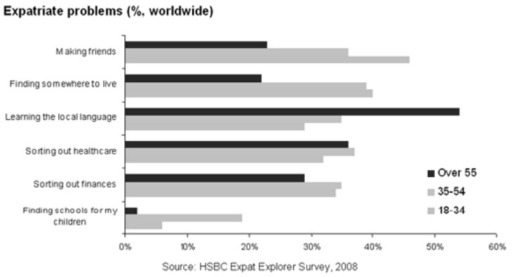
When going to a foreign country it is good to check the circumstances of the destination. Because of war or terrorism it might be dangerous especially in certain parts of that country and one should be prepared.

To ensure in-facility emergency preparedness companies use evacuation protocols, cooperation with emergency workers in the public-sector and media relations. Also they try to follow local safety standards and laws. For in-facility security companies can have internal search protocols, out of and into facilities search protocols, procedures for bomb threats, risk control for violence and cameras. (Högel, 2010-11)

Companies usually have policies concerning travel in order to minimize the risks to the company. These policies may include team training in case of hotel evacuation, ordering the employees not to stay above 7th floor or prohibiting top managers from travelling on the same aircraft. (Högel, 2010-11)

For expatriates the move itself can be problematic. Also finding accommodation and integrating to the society are challenges.

According to HSBC Expat Explorer Survey 2008 the most common problems faced by expatriates are learning the local language, finding accommodation, making new friends, sorting out finances and healthcare and finding a school for the children. Usually the younger expatriates learn the local language faster but it's more difficult to make new friends and deal with the practical issues. Even though older expatriates might have more difficulties learning the language they usually get better benefits that help with the practical issues such as accommodation. Many expatriates underestimate the difficulties that they might face when venturing abroad. Of course there are differences between countries.



Source: HSBC Expat Explorer Survey, 2008

Problems of Expatriates:

The most common reasons for assignment refusal and failure are spouse and family issues. Because the majority of expatriates (60%) have marital status and of those expatriates 81% are accompanied by their spouse or partner companies need to seriously take spouses or partners needs into consideration. According to statistics 34% of the assignment refusals were caused by family concerns and 17% spouses or partners career. The second biggest reason for assignment failure (the biggest is employee leaving the company) is spouses or partners dissatisfaction. This causes 17% of the assignment failure. The third biggest reason was other family concerns which caused 11% of the failures. (Global Relocation Trends Survey Report, 2012)

Conclusion:

Building an expatriate system that works is like constructing a building, that istall, lasts through earthquakes or typhoons, and attractive. Organizational supportduring the pre-departure period of expatriation is a long process that preparesexpatriates for oversea assignments which set the foundation for expatriate success.The continuous support for expatriates during the foreign assignments allowsexpatriates to adjust and response to different encounters in different cultureenvironments. Then, a good expatriate career development upon return is where thecompany can utilize expatriates' new expertise and make expatriation attractive in theeyes of future expatriates. Consequently, these organizational factors are positivelyrelated to the likelihood of expatriate success. Most importantly, when overseasassignments are carefully managed by the organization, the benefits for bothexpatriates and the organization are likely to be substantial.

In this paper, a current picture of expatriate management practices in company A,and some suggestions based on related research findings are presented as theimportant factors for expatriate success.

 ISBN: 978-81-910118-7-6

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HRM: "As a Tool to Competitive Advantage."

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Abstract:

Traditional sources of competitiveness, such as strong financial resources, production capacities, cheap & easily available raw materials, distribution channels etc., are considered necessary, but no longer sufficient for organizational success.

This paper highlights the age of globalization and its relation to human resources, which are viewed as a source of competitive advantage. Therefore, the aim of this paper is to reveal that human resources management is essential to ensure the success of any organization which is based on the belief that an organization gains competitive advantage through utilization of its employee power effectively and efficiently. Referring to this global challenge of HRM, efforts to identify whether the HRM can be considered as a source of competitive advantage of the firms or not?

Finally the findings of this study highlights the value of human resources (HR) and its strategic activities which have an influence on organizations performance and competitive abilities.

Human resource management- Human resources, their knowledge, skills and competencies as central binding force among them, become the most valuable asset, the new source of wealth, and the key ingredient of competitive advantage.

Fresh look to HRM- is work knowledge and intellectual capital is crucial for economic success, it is logical that the ability to attract, retain, and use the talents of employees, provides a competitive edge. Consequently, the HR functions, recruiting, training & retaining, now are merged with the mainstream of organizational strategy and management.

Key Words: *Competitive advantage, skill competencies, Globalization, Human Resource Management (HRM), Performance management.*

Introduction:

In today's fast changing globe, it is important for the organizations to understand that change for survival of organizations and this responsibility lies upon shoulders of HR professionals, as deals with live source-HR.

HR's creation of true competitive advantage comes from continuously improving the organization to fit to the changing business environment. Traditional concept of HR, acting vital link between the strategic and operational functions, is to be removed with the emerging of Business Partnering trend. HRD managers, presently, do not have enough preparation in terms of skill-sets. They need to do

 ISBN: 978-81-910118-7-6

more of Professional preparation. The HR professional of tomorrow has to be more proactive and systematic. HR department has to perform interdisciplinary responsibilities. In the world of globalisation and free market, organizations are facing increasing competition and therefore faced with issues on how to ensure survival and competitive advantage. In meeting the external pressures, measures such as mergers, acquisitions, strategic alliances, downsizing and restructuring are common responses. In a nutshell, the integral part of these responses is the method of using human resources (HR) more effectively.

Competitiveness refers to a firm's ability to maintain and gain market share in its industry. It is related to firm's effectiveness, which is determined by whether the firm satisfies the needs of stakeholders.

Competitive Advantage means a firm implementing a value creating strategy, not implemented by any other competitor.

Competitive advantage refers to the ability of an organization to formulate strategies to exploit profitable opportunities, thereby maximizing its return on investment. The main source is its' organizational capability. Organizational capability represents the business's ability to manage the organizational systems and people in order to match customer and strategic needs.

The key objectives:

(1) To provide a literature review of HRM's contribution to the achievement of competitive advantage through people, and

(2) To identify the Role & Practices of HRM, required to gain competitive advantage.

Scope of the Study:

Scope of the study is limited to study the role of HR department in building Organizational Competency and mostly focusing on the different functional aspects of HR in effective implementation to increase the highest competitiveness of the organization, mostly in India.

Methodology:

The study is conducted using secondary data.

Secondary data, was collected from various books, articles, journals and blogs on HRM & Competitive Advantage.

Limitations of the study:

- The study considers HRM, more in Indian business houses i.e. focus laid on how best HRM roles are carried out.
- Human resource managers are well positioned to play an instrumental role in helping their organizations, bound by certain ethics, may not be possible in practice, due to certain issues related to unions, Govt. Policies, labour laws, political situation or top management etc.

Review of the Literature:

There are enormous research studies that have looked into the changing HR

practices and roles of HR professionals. Some relevant studies to our topic are as under:

1) One such study proposed that to sustain the transformation of human resource functions, HR professionals must develop and demonstrate a new set of competencies to fulfil their changing roles and responsibilities (Yeung et al., 1996). Based on in-depth interviews, they proposed an HR competency model which is both generic & specific competencies. (i.e. the key competencies)

Integral Review - A Journal of Management, E-ISSN : 2278-6120, p-ISSN : 0974-8032,Volume 5, No. 2, Dec.-2012, pp 1-11

(http://www.integraluniversity.ac.in/net/journalsAndPublications.aspxIntegral Review)

2) A Journal of Management, Vol.5 No.2, Dec.-2012, is frequently used by Companies in different industries) and specific (i.e., able to highlight the competency differences in various HR roles). Research indicated that only 10-35% of HR professionals possess the required new competencies. They also discussed ten strategies that ten prominent companies use to bridge the competency gap of their HR professionals. Important levers for competency development include planning and assessment, communications, performance management, training, and development.

Research was conducted on the strength of HR practices in India and their effects on employee career success, performance, and potential (Stumpf et al., 2010). The study explores the role of HR practices for individual and organizational success via a survey of 4,811 employees from 32 units of 28 companies operating in India. Study focused on employee perceptions of the effectiveness of three specific human resource practices within their firms and the relationship of these practices to career success, performance, and potential.

Companies operating in India appear to be creating strong human resource climates based on structured HR practices in performance management, professional development, and normalized performance ratings potential. Study also reports differences in perceptions of HR practices among national, international, and global companies and among the industries of information technology (IT), manufacturing, and services.

Research has also looked into empirical assessment of human resource competencies with data from 12,689 associates of human resource (HR) professionals in 1500 businesses in 109 firms (Ulrich et al., 1995). The research work focused on an extensive assessment of HR competencies. It extended current HR theory and practice in two ways. First, it proposed specific competencies HR professionals may demonstrate to add value to a business. Second, it offered an empirical assessment of how these competencies affect the performance of HR professionals as perceived by their Associates. The results indicate that when HR professionals demonstrate competencies in business knowledge, delivery of HR, and management of change, then HR professionals are perceived by their associates as more effective.

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3) Deepak Sharma Integral Review - A Journal of Management, Vol.5 No.2, Dec.-2012- contribution has almost twice the influence on the businesses where it occurs. Strategic Contribution has a 43% impact on business performance, Personal Credibility was found to have 23% impact on business performance, HR Delivery was found to have 18% impact, Business Knowledge was found to have 11% impact and HR Technology was found to have 5% impact on business performance.

4) McClean and Collins (2011) examined the relationship between high-commitment HR practices and firm performance in professional services firms through the mediator of employee effort. They found that the relationship between effort and performance is contingent on the value of the employee group to organization's competitive advantage, suggesting that organizations may only want to expend the effort and resources on building a high-commitment HR system for employee groups that are clearly tied to creating organization's competitive advantage.

5) Kydd and Oppenheim (1990) with the help of case study research in four organizations proposed a two-dimensional contingency framework which offers guidelines as to how certain HRM practices should be implemented to gain competitive advantage. The first dimension is based on environmental challenges ce that an organization faces. The second dimension is based on organization's key competitive thrust is to be an innovator. An organization's position on each of these dimensions predicts what its approach will be to HRM practices and issues.

Schuler (1992) defined strategic human resource management as all those activities affecting the behaviour of individuals in their efforts to formulate and implement the strategic needs of business and proposed a 5-P model of strategic human resource management. In his model, business objectives are articulated and flow into the

5) P component enabling human resources management philosophy, policy, programmes, practices and processes to be established.

6) Another research study identified ten approaches that organizations can follow to establish the linkage between business plans and HR plans in an organization (Garavan et al., 1995). These approaches are top down approach, market driven approach, career planning approach, the featuring approach, performance diagnosis approach, artificial experience approach, pulse taking approach, the educational approach, interpersonal approach and the rifle approach.

7) Roles for HR Professionals: The Model – The model identifies roles that HR professionals are going to play in future to cater to the changing needs of the organizations. Organizational goals and HR Systems and Practices serve as basis from which the roles of HR practitioners are going to emerge.The roles might not be present in same proportion.

Roles for HR Professionals Integral Review - A Journal of Management, Vol.5 No.2, Dec.-2012

8) In all organizations but would vary depending on the organizational vision and objectives, sector, environment, competition and competencies required from HR professionals to proactively work on and provide solutions to strategic business issues facing the organization.

Source : Author,3.1 Roles for HR Professionals in the model :3.1.1 Strategic Partner:

HR department as a whole and HR professionals have to become a strategic business partner in developing a highly effective organization by aligning the HR strategy with the business objectives. HR managers should identify weaknesses that are affecting business performance, create value by shaping that organization around business needs, identify the core areas that need attention in terms of people and technology, provide input and take action to increase organizational and individual capabilities. Systems to motivate employees for their long term commitment and stay and improve business and individual performance. HR professionals need to have a total business orientation. They need to be goal-driven and use HRD effectively as a strategic intervention and a future building tool. They must possess a high degree of cross-functional orientation. They need to align HRD very well with business and organizational goals. They have to be vision-driven and futuristic. They need to balance the present with future, short-term and long term systems and spirit..

9) Deepak Sharma,Integral Review - A Journal of Management, Vol.5 No.2, Dec.-2012, with HR competencies, HR practitioners need to increasingly focus on cross functional excellence such as exposure to other functions and internal customer service orientation. HR departments of tomorrow need to work on formulating policies and systems that are able to develop leadership qualities such as leading from the front, empowering nature, coach and mentor, a role model, value driven and culture sensitive. HR professionals need to work on strategic change management skills such as change positive, creativity, empathy and problem-solving skills.

10) The model of organizational learning and strategic HRM for sustainable competitive advantage

Source: Khandekar, Aradhana; Sharma, Anuradha. "Organizational learning in Indian organizations: a strategic HRM perspective,"

Journal of Small Business and Enterprise Development, 12, 2, 2005b, pp. 222.

The resource-based view suggests that HR systems can contribute to sustained competitive advantage.

 ISBN: 978-81-910118-7-6

11) Changing Roles of HR professional:

Aradhana Khandekar, Anuradha Sharma, (2005) "Managing human resource capabilities for sustainable competitive advantage: An empirical analysis from Indian global organisations", Education + Training, Vol. 47 Iss: 8/9, pp.628 - 639

Roles of HR Professional.
Strategic Partner
M&A facilitator
Diversity Manager
Functional Expert
Goals of Organiz ation.
HRD System & Practices
To Deliver value HR professinals need to align their roles with the strategic goals of the orgn. & work to serve customers, Employess and investors
Individual, Team & orgn. Effectiveness, high performance of human capital within the orgn.
Talent Mgr
Change Agent
Performance Mgr
Career Mgr

Conclusions:

- As competitors strive to win the war for talent, effective human resource management is necessary to gain true competitive advantage in the marketplace.
- Three challenges companies face are sustainability, technology, and globalization. Emphasize how managers can more effectively acquire, develop, compensate, and manage the internal and external environment that relates to the management of human resources.
- On the basis of HRM role, some recommendations for effective utilization of human resources in an organization that can act as a tool for enhancing the competitive advantage of the firms. Such as: (a) to increase the superiority of the firms' managers should provide a framework that not onlyoffersperformancemeasurements, but helps planners to identify what should be done and measured; (b) to get the best output management should provide better opportunities for their employees truly to implement and execute their modern strategies for business development;
  - to increase the excellence of the firm, management should offer education and guidance about the development and advancement of their employees.
  - (d) to improve the firms' competitiveness managers should develop self-knowledge & skills initially,cooperation with other firms in order to enhance joint development as well as to reduce cultural divergences.
- Moreover, the key dimensions of the present business environment mainly concentrating on proper access of knowledge, skills and technology up gradation. Where, HRM is considered to be a key player as a Business partner.

Suggestions:

- Socialization activities (such as teaming and developmental assignments) aid in developing implied knowledge as a source of sustained competitive advantage.
- Unlearning, e-learning & training are the essential ingredients of HR development, indirectly leading to a new source of sustained competitive advantage.

- Giving free hand / empowering employees, produces long term relationship & sustainable behavioural competencies. Issues of retention are reduced.
- HRM's role of Business partner, empowers the HR people first, makes strong foundation of HR.

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Human Resource Management: Gaining a Competitive Advantage, 8/e, Raymond A. Noe, John R. Hollenbeck, Barry Gerhart,, Madison Patrick M. Wright, ISBN: 0078029252,Copyright year: 2013

Recent Trends in Performance Appraisal System with reference to Pharmaceutical Industry

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Introduction:

Performance appraisal continues to be a subject of interest and importance to human resource specialists. For decades, performance appraisal has received considerable attention in the literature, for both researchers and practitioners alike. Many authors (Bernardin & Klatt, 1985; Hall, Posner, & Hardner, 1989; Maroney & Buckley, 1992; Thomas & Bretz, 1994) maintain that there is a considerable gap between theory and practice, and that human resource specialists are not making full use of the psychometric tools available. To support their claim, these authors cite surveys of practitioners concerning current performance appraisal methods and use.

Performance Appraisal and Indian Pharmaceutical Industry:

A formal periodic review and evaluation system for an individual's or team's job performance.

A process that significantly affects organizational success by having managers and employees work together to set expectations, review results, and reward performance.

An affluent Indian economy cannot be separated from the tremendous growth being witnessed in the Indian Pharmaceutical industry. And as part of this sector, employees in Pharmaceutical companies play their part in sustaining the demand-supply equation. Therefore it is only fair that they receive adequate compensation. Considering that the structure of Pharmaceutical companies has changed rapidly due to global pressures, new drug delivery systems, lean management, and new methods of work and technology up gradation, there has been a tremendous requirement of skills and competencies to give overwhelming outcomes in these dynamic situations. Performance appraisals therefore are key to sustained performance in the face of increasing competition.

Divakar Kaza as President, HR Lupin outlines the appraisal procedure, "An effective performance appraisal emphasises individual objectives, organizational objectives and also mutual objectives. This rule holds true for companies across sectors, including Pharmaceutical industry.

The most commonly followed method is that of Management by Objectives (MBO). In this, short term objectives for an

 ISBN: 978-81-910118-7-6

employee are chalked out that are specific, measurable, achievable, reviewable and time bound.

Tanu Hora-Head Human Resource, Mankind Pharmaceutical explains the thrust of appraisal procedures in the Pharmaceutical industry saying, "The purpose of designing performance management system is strategic: to link employee activity with organization needs; administrative, salary, transfers, promotions, lay off, rewards. There is also a developmental aspect as it involves employee training for right fit."

Justifying the aggregation of money with work and its outcome she says, "Performance Related Pay (PRP) improves the performance of an individual thereby increase the performance of organization as financial incentives are -the prime motivator for any individual and motivated employees always bring positive results on performance. There is a flip side to it as well. As it can strain (employee) relations, PRP is a prime source of motivation but not the sole source."

Trends include Full time performance appraisal, 360 – degree appraisal, Valuable line management tool etc. Trends in performance appraisal practices are emerging topics of significant interest in Human Resource Management.. The study will contribute to the body of knowledge on performance appraisal and thus will benefit the human resource management.

Performance Management in its present form is a trend in itself. Performance Management has progressed from Appraisals and Reviews to a valuable tool to drive performance, link performance to strategy and to do this in an environment that is less onerous on HR than it has ever been in the past. Line Management is accepting and in many cases driving the desire for adequate systems that they can use to deliver both the organisations and their own goals and objectives. Employees are benefiting from better recognition of their achievements and better opportunities to advance their careers. The world of Performance Management and Appraisal's is changing very quickly. This paper outlines the major trends in Performance Management with Pharmaceutical industry that are taking place globally.

Methods of Performance Appraisal:

Figure No. 1

Performance Appraisal Methods & Trends

1. **720 – Degree Appraisal:** As the name itself suggests, in this method, the 360 degree appraisal method is practiced

twice. First the 360 – degree appraisal is done, where the performance of the employee is analysed and having a good feedback mechanism, the boss sits down with the employee again a second time and gives him feedback and tips on achieving the set targets.

2. **360 – Degree Appraisal:** Also known as 'multi – rater' feedback, where feedback about employee's performance comes from a supervisor/ superior, co – worker, client/ customer, subordinates and the self – assessment of the employee himself.
3. **270 – Degree Appraisal:** In this method employee is evaluated by 3 persons, himself, boss and co – workers.

Figure No. 2

4. **180 - Degree Appraisal:** The employee and the boss evaluate his performance on a monthly basis.
5. **90 – Degree Appraisal:** The employee evaluates himself and shows his strengths and achievements or his boss evaluates him.
6. **Group Rank Ordering:** In this kind of performance appraisal, the supervisor places employees into a particular classification such as 'top one fifth' and 'second one fifth'. If a supervisor has ten employees only two could be in the top fifth and two must be assigned to the bottom fifth.
7. **Confidential Report:** It is a descriptive report prepared, generally at the end of every year, by the employee's immediate superior. The report highlights the strengths and weaknesses of the subordinate. The report is not database. The impressions of the superior about the subordinate are merely recorded there. It does not offer any feedback to the appraisee. The appraisee is not very sure about why his ratings have fallen despite his best efforts, why others are rated high when compared to him, how to rectify his mistakes, if any; on what basis he is going to be evaluated next year, etc. Since the report is generally not made public and hence no feedback is available, the subjective analysis of the superior is likely to be hotly contested. In recent years, due to pressure from courts and trade unions, the details of a negative confidential report are given to the appraisee.
8. **Essay Evaluation:** Under this method, the rater is asked to express the strong as well as weak points of the employee's behavior. This technique is normally used with a combination of the graphic rating scale because the rater can elaborately present the scale

 ISBN: 978-81-910118-7-6

by substantiating an explanation for his rating.

9. **Critical Incidents:** The supervisor's attention is focused on specific or critical behaviour that separate effective from ineffective performance.
10. **Checklists and weighted checklists:** Another simple type of individual evaluation method is the checklist. A checklist represents, in its simplest form, a set of objectives or descriptive statements about the employee and his behavior. If the rater believes strongly that the employee possesses a particular listed trait, he checks the item; otherwise, he leaves the item blank. A more recent variation of the checklist method is the weighted list. Under this, the value of each question may be weighted equally or certain questions may be weighted more heavily than others. The following are some of the sample questions in the checklist.
11. **Graphic rating scale:** Perhaps the most commonly used method of performance evaluation is the graphic rating scale. Of course, it is also one of the oldest methods of evaluation in use. Under this method, a printed form, as shown below, is used to evaluate the performance of an employee. A variety of traits may be used in these types of rating devices, the most common being the quantity and quality of work. The rating scales can also be adapted by including traits that the company considers important for effectiveness on the job.
12. **Behaviorally anchored rating scales:** Also known as the behavioral expectations scale, this method represents the latest innovation in performance appraisal. It is a combination of the rating scale and critical incident techniques of employee performance evaluation. The critical incidents serve as anchor statements on a scale and the rating form usually contains six to eight specifically defined performance dimensions.
13. **Management by Objectives (MBO):** MBO represents a modern method of evaluating the performance of personnel. Thoughtful managers have become increasingly aware that the traditional performance evaluation systems are characterized by somewhat antagonistic judgments on the part of the rater. There is a growing feeling nowadays that it is better to make the superior work with subordinates in fixing goals. This would inevitably enable subordinates to exercise self-control over their performance behaviors. The concept of management by objectives is actually the outcome of the pioneering works of Drucker, McGregor and Odiorne in management science. Management by objectives can be described as "a process whereby the superior and subordinate managers of an organization jointly identify its common goals, define each individuals' major areas of responsibility in terms of results expected of him and use these measures as guides for operating the unit and assessing the contributions of each

of its members". MBO thus represents more than an evaluation programme and process. Practicing management scientists and pedagogues view it as a philosophy of managerial practice; it is a method by which managers and subordinates plan, organize, control, communicate and debate.

14. **Ranking method:** This is a relatively easy method of performance evaluation. Under this method, the ranking of an employee in a work group is done against that of another employee. The relative position of each employee is tested in terms of his numerical rank. It may also be done by ranking a person on his job performance against another member of the competitive group.

15. **Paired comparison method:** This relative method of performance is one in which one employees' performance is compared to the performances of the other employees.

16. **Forced distribution method:** Under this system, the rater is asked to appraise the employee according to a predetermined distribution scale. The rater's bias is sought to be eliminated here because workers are not placed at a higher or lower end of the scale. Normally, the two criteria used here for rating are the job performance and promo ability. Further, a five point performance scale is used without any mention of descriptive statements. Workers are placed between the two extremes of 'good' and 'bad' performances.

17. **Group appraisal:** In this method, an employee is appraised by a group of appraisers. This group consists of the immediate supervisor of the employee, other supervisors who have close contact with the employee's work, manager or head of the department and consultants. The head of the department or manager may be the Chairman of the group and the immediate supervisor may act as the Coordinator for the group activities. This group uses any one of multiple techniques discussed earlier. The immediate supervisor enlightens other members about the job characteristics, demands, standards or performance, etc. Then the group appraises the performance of the employee, compares the actual performance with standards, finds out the deviations, discusses the reasons therefore, suggests ways for improvement of performance, prepares an action plan, studies the need for change in the job analysis and standards and recommends changes, if necessary.

    This method eliminates 'personal bias' to a large extent, as performance is evaluated by multiple rates. But it is a very time consuming process.

18. **Human resource accounting:** HRA is a sophisticated way to measure (in financial terms) the effectiveness of personnel management activities and the use of people in an organization. It is the process of accounting for people as an organizational resource. It tries to place a value on organizational

 ISBN: 978-81-910118-7-6

human resources as assets and not as expenses. The HRA process shows the investment the organization makes in its people and how the value of these people changes over time. The acquisition cost of employees is compared to the replacement cost from time to time. The value of employees is increased by investments made by the company to improve the quality of its human resources such as training, development skills acquired by employees over a period of time through experience, etc. This technique has not developed fully and is still in the transitionary stage.

19. **Assessment centre:** Mainly used for executive hiring, assessment centres are now being used for evaluating executive or supervisory potential. An assessment centre is a central location where managers may come together to have their participation in job – related exercises evaluated by trained observers. The principal idea is to evaluate managers over a period of time, say one to three days, by observing their behaviour across a series of selected exercises or work samples. Assessees are requested to participate in in – basket exercises, work groups (without leaders), computer simulations, role playing and other similar activities which require the same attributes for successful performance, as in the actual job. After recording their observations of rate behaviours, the raters meet to discuss these observations. The decision regarding the performance of each assessee is based upon this discussion of observations. Self appraisal and peer evaluation are also thrown in for final rating.
20. **Field Review Method:** Where subjective performance measures are used, there is scope for rater's biases influencing the evaluation process. To avoid this, some employees use the field review method. In this method a trained, skilled representative of the HR department goes into the 'field' and assists line supervisors with their ratings of their respective subordinates. The HR specialist requests from the immediate supervisor specific information about the employees performance. Based on this information, the expert prepares a report which is sent to the supervisor for review, changes, approval and discussion with the employee who is being rated. The ratings are done on standardized forms.
21. **Forced choice method:** This method was developed to eliminate bias and the preponderance of high ratings that might occur in some organizations. The primary purpose of the forced choice method is to correct the tendency of a rater to give consistently high or low ratings to all the employees. This method makes use of several sets of pair phrases, two of which may be positive and two negative and the rater is asked to indicate which of the four phrases is the most and least descriptive of a particular worker.

22. **Full Time Performance Appraisal:** Annual appraisal is rapidly being replaced with Full time Performance Management. This trend provides a mechanism where both managers and employees are able to make relevant notes on performance related issues throughout the year. This function is also referred to as "performance diary". When the appraisal is conducted, both are better prepared and have a full record of achievements or areas for development and coaching throughout the year. This feature also promotes an ongoing dialogue between managers and employees and ensures that both are on track to achieve their goals for the year.
23. **Low administration Performance Management:** Early automated performance management systems were stand alone systems that offered several benefits but still suffered from high administrative input. These systems required HR to make duplicate data entries for all additions, changes and deletions to staff because entries had to be made in both the payroll system and the performance management system. Today, performance management applications can be fully integrated with the payroll system which means data entry is only required in payroll. All changes made to payroll are automatically made to the performance management application. This substantially reduces costs related to administration, enabling HR to assist line management with more strategic issues and matters of compliance.
24. **Link to Strategy:** Performance appraisal systems are the vehicle for setting organizational objectives to organisational strategy. Combined with full time performance diary functionality, performance appraisal system is now one of the most powerful methods for effectively directing organisational effort.
25. **Psychological Appraisals:** Large organisations employ full – time industrial psychologists. When psychologists are used for evaluations, they assess an individual's future potential and not past performance. The appraisal normally consists of in – depth interview, psychological tests, discussions with supervisors and a review of other evaluations. The psychologist then writes an evaluation of the employee's intellectual, emotional, motivational and other work related characteristics that suggests individual potential and may predict future performance. The evaluation by the psychologist may be for a specific job opening for which the person is being considered, or it may be a global assessment of his or her future potential. From these evaluations, placement and development decisions may be made to shape the person's career. Because this approach is slow and costly, it is usually required for bright young members who, others think, may have considerable potential within the organisation.

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26. **Retention :** Organisations have now made the link between performance appraisal systems and retention. In the war for talent, employees want to be appreciated and developed. The answer to this is frequent reviews and developmental planning. Automated performance appraisal addresses both of these needs.
27. **Succession Planning:** Performance appraisal systems can leverage the data collected to implement succession planning system to allow HR to realise successors for critical and non critical and also the high potential staff. A significant benefit of this is that the employees see the organisation as a developing career path and this binds them closer to their organization and work.

Conclusion:

Performance Appraisal system in its present form is a trend itself. Performance Appraisal system has progressed from appraisals and reviews to a valuable tool to link performance to strategy and to do this in an environment that is less onerous on HR than it has ever been in the past. In a nutshell performance appraisals are an important part of any corporate or organizational plan because it drives the manpower in various ways to work their best towards the success of the goals and targets.

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A Study of Global Strategies on Social Security and Pension Reforms and Comparison of Pension Reforms in India and China

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Abstract:

The study analyses the state of pensions on global level and comparision of pension system in China and India, the two populous countries in the world accounting for over 37% of the world population. Ageing scenario, old age dependency, pension coverage and pension reforms in the two countries are analyzed China and India have huge similarities, populous countries with more than half of the population in rural areas and a high proportion of them in the unorganized labor force with little or no access to pension plans. Both countries are among the fastest growing economies with rapid urbanization and increasing personal consumption levels. However due to its one-child policy China is set to see rapid aging and increased old age dependency .With a large unorganized workforce living in rural areas and a decline in traditional families, old age pensions coverage has been limited and/or inadequate. China and India are in the early stages of implementing pension reforms and have devised/ introduced old age pension schemes recently. Pension reforms are also underway with the government inviting investment companies to manage part of the public pension fund.

Introduction:

The debate on social security reforms has taken the centre stage in developed and developing countries as one of the most critical policy issues during recent times. The policymakers and researchers are intensely searching for an appropriate mecha¬nism to confront the complex challenges arising out of changing population dynamics, ageing, growing inability of the government to finance unfunded pensions, increasing costs of retirement and so on. Pension reforms have, therefore, become a serious policy concern for planners, policymakers, market analysts and elderly population.

Old-age income security is one of the oldest socio-economic concerns of the society, which in course of time with the progress of civilization and economic progress became the cornerstone of policymaking and socio-economic governance system. The thoughts of ensuring old-age income support for those who contributed to our growth gradually emerged as an important factor influencing state policy. Though the concept and importance of old-age economic support to the elderly remained the same, the format has changed over time with the changing dynamics of social policy and philosophy of economic policy. Faster economic growth has induced higher employment and income genera¬tion

ISBN: 978-81-910118-7-6

leading to better medical service and good health care which has improved the per capita consumption and improved the average longevity of people. Increased longevity forced the states and statesmen to pay serious attention to old-age pension and social security through innovative strategy and policy within the given limitation of resources and political framework.

Background and Need for the Study:

There is often confusion about definition of the term social security. Sometimes it used to denote social protection, while it includes only old-age pension at other times. While social security basically concerns providing old-age income security, social protection aims at protecting population against various economic risks through unemployment benefits and health insurance in addition to old-age income security through pension. While pension is linked to workers and labour market, social protection covers all citizens including non-labour. Therefore, social security has broader (used in mostly in Europe) and narrow sense (used mostly in developing countries). The term social security is generally used in a broader sense to cover various types of risks associated with old age, health, unemployment and so on. In the European Union, social se includes social insurance and social assistance programme as mentioned by Dethier in/ the 2020 Focus Brief on the World's Poor and Hungry People:

Social Insurance may be provided through mandatory contribution or through excheq¬uer-supported programmes to cover major risks like unemployment, health, old-age income and so on, while social assistance is usually a means-tested programme to pro¬tect the poor.

The core objective of social security reforms is to introduce affordable old-age eco¬nomic support and social protection for people, particularly those who cannot afford old-age savings. Therefore, while talking about social security we need to take a holistic view of old-age economic security as any such reforms of social security must contain ald age-related cash and health benefits. It is possible if social security is considered as package of at least two important ingredients—namely old-age pension and old-age health insurance. However, a major amount of focus of social security globally and developing countries is particularly centred around pension system. Health insura¬ce as an important component of the social security is mostly prevalent in developed in tries and 'with the exception of United States, all the developed countries now,have universal health insurance' (Dethier 2007). Along with universal health insurance, most of the developed and many developing countries have introduced universal old pension.

Old-age Pensions in India and China - Issues and Prospects:

Overview:

Traditionally social security systems in India and China existed in the form of informal arrangements of joint families. In addition, government owned enterprises provided most of the organized sector employment offering defined benefit (DB) pension schemes. The emergence of nuclear

families has reduced the traditional social support mechanism, and rising pension deficits have forced governments in the two countries to move towards a contributory pension model.

Changing Economic And Demographic Landscape:

Economy and Growth

China and India have both emerged as among the world's fastest growing economies in the world. China's GDP growth has averaged around 10% for well over a decade, while India has broken free from lower growth and has averaged more than 8.5% over the past five years. Rapid economic growth has boosted per capita incomes, driving up savings and has also increased income in-equality in both the countries.

China has a budget deficit of 0.8% of GDP and its export led economy has resulted in huge trade surplus exceeding $2 trillion. In comparison, India runs a budget deficit of 3.1% in 2008 and a current account deficit of 1.4% of the GDP. Hence, while India is constrained by the level of funding it can provide for social security programs, China has already planned a year on year increase in budget allocation to provide for its pension programs.

Demography:

Decline in joint families; The traditional joint families as a social setup had risks distributed with households taking care of the social security needs of the elders. The presence of young and the old under the same roof enabled spreading of income risks and had for long negated the need for a centralized system of retirement planning. Now with the decline in joint families, the first or second generation of middle aged now needs to plan for their old age.

Life expectancy on the rise; While the global population especially in developed countries is rapidly aging, India is reaping a demographic dividend with a higher proportion of working age people entering the workforce which is set to keep the economy healthy for the years to come. China on the other hand has implemented a one child policy since the 1970s resulting in lower birth rates while life expectancy continues to rise due to better living standards and healthcare conditions. This has resulted in a marked increase in ageing population and rising old age dependency as compared to India.

India's life expectancy has risen dramatically from 49 years in 1970 to 64 years at present and is set to rise to 75.6 years by 2050 and the proportion of old age population is also set to rise from around 5% now to 14.5% by 2050. In comparison China will have 23.7% of population above 65 years by 2050 while Japan will have 37.7% of its population in that age group. To put this ageing data in perspective, by 2030, more than one out of every four persons in China will be over 60 compared to one in every ten persons in India. With rising life expectancy, by 2030 an average worker in China needs to provide for savings for 16 years post retirement. Or a worker entering the workforce at age 25, expecting to retire at the age of 55 needs to provide resources for more than 20 years for his postretirement

 ISBN: 978-81-910118-7-6

life from 30 years in employment.

Increasing job creation in the private sector: Private sector is accounting for a larger proportion of new job creation and has emerged as the major avenue of employment and re-employment. This has, emphasized the need for more options for private pensions and for further developing voluntary pensions. Private sector accounted for more than 75 percent of new jobs created in China over the past ten years (2007, United Front Work Department). In India, growth in IT, hospitality and health sectors have resulted in buoyant job creation in the private sector with no mandated pension options similar to public sector enterprises. According to The Organization for Economic Cooperation and Development (OECD) Employment Outlook 2007 report, India leads the BRIC nations in job creation adding close to 60 million new jobs between 1999/2000 and 2004/2005, while China added 37 million jobs during the same period. Formal salaried jobs though accounting for just 14.4 percent of total workforce (according to OECD); have registered an annual growth of 3.6 percent, higher than the growth in labor force during the period (2.9%). With a large section of the younger population moving into private employment, improving awareness and knowledge of pension planning is critical.

Pensions in India and China:

Comparison of Pension reforms in India and China

China and India have quite a few similarities in the way the social security systems are structured. Both countries had a highly fragmented pension system, confided mainly to state owned enterprises (SOEs) or Public sector enterprises. These traditional government supported pension systems have crowded out private providers in both the countries.

(Bob Charles and Phil Collins, 2005)

Among the two countries, China has been early to consider reforming its pension system and introduced the three-tier pension system in 1991. India embarked on its pension reforms a decade later in early 2000 in a move toward defined contribution (DC0 pensions. Both the countries have focused on reforming the mandatory pension for organized labor. However a large section of rural workers and the unorganized sector workers still aren't covered sufficiently by the schemes.

China

China's pension system has been primarily confined to employees of the state owned enterprises SOEs. In addition, its pension system is decentralized and highly fragmented with no major national level social security legislations. The formal system of income security and social insurance was established by the Communist government of the Peoples Republic of China in 1949. The 1951, introduction of the Regulations on Labor, set the focus on workers and covered the employees of SOEs. With state owned enterprises accounting for 87% of all enterprises, such a system, helped in covering a vast majority of the urban workers' social security needs (Felix Salditt, Peter Whiteford and Willem Adema, 2007).

The present phase of reforms was initiated in 1987 with the introduction of individual contributions to pensions. SOE employees were required to contribute up to 3% of their basic wages and employers contributed 15% of the pre-tax wage bill.

Another major step in centralizing and defragmenting pensions was made in 1991 with the State Council Resolution on the Reform of the Pension System for Enterprise Workers. This advocated the integration of pension systems at the provincial level and finally at the national level.

Table 1: China - Roadmap of Pension reforms

Year	Events
1949	Establishment of Peoples Republic of China and introduction of a formal system of income security and social insurance
1951	Introduction of Regulations on Labour Insurance, providing the framework for the provision of various benefits based on the principle of lifetime employment and association with a state owned enterprise
	Cultural revolution - Pension systems ceased to exist
1978	Amendments relaxed the eligibility criteria to permit pensions after 10 instead of 20 years introduced higher pension rates and job in the state sector was promised to one child per retiree. formalized the practice of enterprises bearing full responsibility for all of the labour insurance benefits
1986	Introduction of individual contributions in the pension system
1991	State Council Resolution on the Reform of the Pension System for Enterprise Workers, promoting the integration of local programmes at the provincial level and eventually at the national level
1992	Pension fund was extended to collectively owned enterprises (COEs)
1995	Introduction of Circular on deepening reform of pension insurance system for enterprises employees '
1997	Basic old-age insurance system for enterprise employees in urban areas across the country are unified by the social-pool-plus-personal-accounts scheme
1999	Basic pension coverage expanded to include foreign-invested enterprises, private enterprises and other enterprises in urban areas
2000	Establishment of the National Social Security Fund
2001	Government undertakes experimental reforms in pilot areas to improve
2004	Ministry of Labor and Social Security (MOLSS) issues provisional regulations
2005	MOLSS grants first batch of 37 operating licenses
2007	Second batch of operating licenses issued

To plug its wide pension deficit, China set up The National Social Security Fund (NSSF) in August 2000. The fund comes from the fiscal allocation from the central government, proceeds from divestments in state owned enterprises and from the

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proceeds from investment in the stocks, bonds and industries (Xiang Huaicheng, 2005). As of end 2007, the NSSF had assets worth more than $70 billion up from less than $10 billion in 2001.

India

In India, the defined contribution National Pension Scheme was introduced for central government employees of India in 2004. New employees starting January 2004 were enrolled in the DC pension scheme and are required to contribute 10% of their annual salary. In addition, employees can also choose to contribute to a tier-2 savings account from which withdrawals is permitted before retirement. Nineteen state governments and other autonomous institutions have also adopted the National Pension scheme The Pension Fund Regulatory and Development Authority was established on 23rd August 2003. As a major step three public sector companies -- The State Bank of India, UTI Asset Management Company Private Limited and Life Insurance Corporation of India -- were selected as fund managers for the National Pension Scheme. The companies will manage the pension funds of some 300,000 employees initially managing a corpus of $400 million

Table 2: India - Roadmap of Pension reforms

Year	Event
2001	Road-map for a new restructured DC pension scheme for civil servants and the general public announced
2003	New DC pension scheme for civil servants and other workers introduced in the annual budget
2003	Establishment of the interim Pension Fund Regulatory and Development Authority (PFRDA)
2004	NPS introduced for central (civil) government employees
2007	PFRDA selects three public sector companies to sponsor new pension fund management companies for NPS
2007	Launch of the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) to provide Rs.200 per head for all persons below poverty line and aged 65 and above
2008	Employees Provident Fund Organization (EPFO) select four fund managers (including three private sector fund managers) for managing EPF
2009	PFRDA says to extend pension funds (now limited to government employees) to all Indian citizens on April 1 2009

The new pension scheme offers employees two investment options: The low risk option will invest purely in risk free government securities, while the other option will invest a maximum of 15 percent in equities. However, once the PFRDA Bill is passed in the Parliament, PFRDA would allow up to 50 percent investments in equity markets.

PFRDA has also managed to limit the fund management administrative expenses through a competitive bidding to between 3 to 5 basis points. Adding another 5 basis points for brokerage, the total fund management expenses will be around 10 basis points, said to be among the lowest fund management fees in the world. In a

similar move by The Coal Mines Provident Fund Organisation (CMPFO) to pick fund managers for assets of Rs20,000 crore ($4.6 billion), ICICI Securities and SBI quoted as low as 1 basis points. In comparison, typical administrative expenses for mutual funds, life insurance and other services range from 50 bps to 400 bps. By limiting the costs to a much lower base, returns can be over a sustained period of time as higher charges initially can reduce the terminal savings by as much as 20 percent.

Private pension fund mangers will also be accountable for the returns generated by the funds. The PFRDA has made performance as one of the important criteria in assessing performance of the fund managers. Fund Managers are already mandated to generate specified returns. And from the initial signals, the reforms are off to a healthy start – ICICI securities surpassed its mandated 8.5 percent return by a full percentage point.

Comparison of Pensions Structure in India and China:

The pension reforms in India and China are modeled broadly on the World Bank model of pension. In 1994, The World Bank advocated the widely popular three pillar structurefor pension systems

- Pillar I: Non-contributory, Publicly managed, tax financed pillar for social insurance (basic pension)
- Pillar II: Contributory, privately managed fully funded pillar (Mandatory)
- Pillar III: Contributory, individual plans for additional savings and protection (voluntary savings)

China Pensions Structure:

Pillar I: Literature on Chinese Pension structure, normally classify the Pillar I of Chinese pensions under two tiers. The National Social Security fund supports Pillar I

Tier I (Social pooling or basic pensions) is based on a pay as you go approach and is fully funded by employers. The pension payable is calculated as 20 percent of an employee's average monthly wage in the previous year. Payment band is fixed at a minimum of 60% and a maximum of 300% of the provincial average wages. Eligibility is a with a minimum of 15 years of pension contributions and age 60 years for Men, age 60 professional women, age 55 for nonprofessional salaried women, or age 50 for other categories of women.

Tier II (Individual Accounts) is a fully funded individual account based mainly on employee contributions. Contribution rates are set at 8% of gross insured earnings of the employee.

Pillar II: (Enterprise annuity) is a voluntary defined contribution pension with individual accounts funded both by the employee and employer. Certain criteria are set for the enterprise including sound financial condition and having a collective bargaining process.

Maximum annual contribution limits are set at one months average pay (for employers) or two months average pay (for employees and employers together) for the previous year

(Hewitt Quarterly, 2006)

 ISBN: 978-81-910118-7-6

Pillar III: Comprises a voluntary individual savings account managed by individual firms or insurance companies. This pillar is at a nascent stage of development and is not supported by tax incentives at present.

India Pensions Structure:

Pillar I: India has no defined benefit basic pillar I scheme as in China. *The government has various old age pension schemes targeting the poor and specific segments of the population but has no guaranteed minimum pension for participants. Hence Pillar I pension is considered non-existent in India (Hélène K. Poirson, 2007, Ramesh Gupta 2002)

Pillar II: Pillar II provides defined benefit and defined contribution schemes for the organized sector under Public and Private Sector Employment New Pension Scheme: Fully funded individual account based defined contributory pension currently open to Government employees only. Though new employees into Government service have been enrolled into this new pension scheme, its implementation is pending approval of the Pension Fund Regulatory and Development Authority (PFRDA) Bill by the Indian Parliament

Employees' Pension Scheme: A defined benefit scheme which applies to all workers covered under the EPF & MP Act of 1952. Employers contribute 8.33% and the government contributes 1.16% (subject to limits) employers 3.67% of the basic salary Provident Fund: A defined contribution scheme which pays out a lump sum benefit on maturity. The scheme covers all employees of notified industries and establishments with more than 20 employees. Employees contribute 12% and employers 3.67% of the basic

Gratuity: Gratuity is a defined amount paid by the company to the employee upon termination of service. It's applicable to employers with a workforce of 10 or more employees. Employees are required to have served for a minimum of five years and the amount payable is two weeks salary for each year in service subject to a maximum limit.

Pillar III: Comprises purely voluntary individual pension plans provided by insurers and mutual funds. The market is at a very nascent stage with very few participants under this pillar.

Coverage of Unorganized Sector:

India - Unorganized sector pension coverage remains low

India's retirement coverage remains low due to presence of a huge workforce in the unorganized sector. According to the National Sample Survey Organization, 93% of the workforce in the country works in the unorganized sector with little access to any form of formal social security. Various government programs including National Social Assistance Programme (NSAP), welfare funds and other public institutions such as Self Employed Women's Association SEWA have aimed to address the social security needs of this segment.

While voluntary pension schemes such as the Unorganised Sector Workers Social Security Scheme (2004) have failed to attract subscription, welfare funds have

been fairly successful in states such as Kerala where these funds cover 54 percent of the informal sector workers. These welfare funds targeted at specific sectors such as construction, beedi industries, tripartite in nature with contributions from the employer in the form of a cess, employee and the government.

The Unorganized Sector Workers Social Security Bill, 2007 is on the anvil and aims to extend the National Old Age Pension Scheme to all the persons above the age of 65 years below poverty Line with a spend of $800 million per annum. The 2008-09 budget provided for $690 million (2007-08: $480 million) for enlarging the National Old age Pension scheme beneficiary cover. At present the central government pays Rs 200 (~$4) to the old age pension scheme per person requiring an equal contribution from the state governments. In 2007, the government also launched a new pension scheme enlarging the coverage to 16 million old age people below poverty line from the earlier 8.7 million with a total outlay of $960 million annually to the Government

Not withstanding the successes of a few initiatives, rural pension programs by the government and other self help groups have covered not more than 5 to 6 per cent of the informal workforce leaving more than four fifths of the country's workforce without any formal social security cover. New initiatives by the government aim to provide monthly payments to old age people below poverty line. But the successes of initiatives, which aim to encourage individual savings for retirement among the unorganized workforce during their working lifetime, remain limited.

China – Unorganized sector and rural pension coverage

Traditionally social protection in rural areas focused on the needy focused mainly on the labor power (the Five-Guarantee households) and households in poverty. One of the major initiatives in 1978 was the introduction of urban style pension programs in select rich rural areas. By 1984 such programs covered 2.4% of the towns and 0.9% of the villages. In 1987, the Ministry of Civil Affairs (MOCA) initiated pilot schemes for the rural social security system at the grassroots level targeting the rural farmers. By the end of 1987 such programs covered 1.4% of the towns and 0.8% of the villages. (Lutz Leisering, Gong Sen and Athar Hussain, 2002)

In 1991, China established a rural old-age insurance system. The pension was contributory in nature supplemented by collectively pooled subsidy and government assistance. Due to the contributory nature of the rural old age pension system, pension payments were below the minimum living guarantee for living residents. In 1998, the rural pension policy was transferred from MOCA to Ministry of Labor and Social Security (MOLSS), which is responsible for social security in urban areas. The lack of an authority in-charge of rural pensions and MOLSS which is focused on reforming the urban pension system suggests a marginalization of the rural pension system (BBVA, 2008).

Due tot the low coverage and on the earlier rural pension scheme, since 2003, a number of local governments have initiated pilot projects on framers pensions,

 ISBN: 978-81-910118-7-6

some of which have achieved moderate success. The Baoji government's initiative on New Rural Social Pension Insurance Programme in 2007, is a Tier 1 scheme aims to alleviate poverty for those aged 60 and above with a qualifying contribution record. Pensioners aged 60 and above receive a monthly pension if their family makes the required premium of about 10% of local average wage to a defined contribution Tier II scheme. People aged 45 and above are required to pay premium regularly till 60 and those younger than 45 years need to contribute for a minimum of 15 years to be eligible for a tier II pension. Current Tier I pension payments are quite low at RMB 60 or 30% of average monthly expenditure. The pilot program launched in five villages and two counties covered 93.6% of the eligible older population as of November 2007.

China plans to introduce a new pension scheme for farmers and aims to provide 80 percent of the farmers with pensions by 2012 and cover 100% of the farmers by 2020. The model is likely to be contributory in nature combining the personal account and the basic pension provided by the government and requires increased funding by the government, (China Daily, 2008)

Issues Challenges and Recommendations:

India and China face similar pension problems including a legacy pension deficit, uncovered rural and unorganized workforce and challenge to improve investment returns of pension funds and setting up the necessary regulations. Both the countries can benefit from the experience of pension programs in the other country or from within their countries on the successes and failures of various initiatives.

India and China's pension systems are broadly focuses on reforming the urban organized workforce. A major step in this regard is the establishment of defined contribution schemes. However a key area of concern in both countries is the inadequacy of pensions for the large proportion of unorganized and rural workforce. Measures to accommodate them under a broader social pension or welfare scheme falls much short of what is required for a minimum standard of living.

In both the countries purely contributory old age pension systems haven't achieved much coverage, necessitating the need for larger government role. China is advocating a contributory old age pension scheme with government participation while India has increased its allocation for a non contributory flat rate pension targeted only at the old age population below poverty line. However contributory schemes targeted at specific groups through co-operatives or self help groups have been successful in India, Similarly successful models at the regional level such as by the Baoji government can also be expanded to cover a wider segment of the population.

China has established a National Social Security Fund to partially fund its pension benefit. India's pension payments are paid out of it budget with no separate fund set aside as in China. The Punjab state of India has established a Dedicated Social Security Fund by charging a 3% stamp duty for registration in the urban areas and a 3%

extra duty on the electrical bills. The state aims to make pension payments to the most vulnerable and weaker sections of the society on a monthly basis. For India, a national social security fund carved out of revenue from special duties and taxes on lotteries and other means of funding will help in having a dedicated fund for the rural old age population.

A centralized system is a main challenge in China, which has different provincial level pension authorities and regulations. China aims to unify the pooling part of Pillar I of its pension system nationwide by end 2009. In case of India, barring three states, others have joined the National Pension. Due to provincial or state level segregations, having a unified solution poses a major challenge for the two countries.

More solutions for the development of the new pension systems have been suggested including tax incentives for Enterprise annuities in China, and separate tax incentives for pension savings which is at present pooled with other form of savings in India, Inaddition need for pension literacy for the middle class is suggested (Vaidyanathan, 2007).

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ISBN: 978-81-910118-7-6

Study of Employee Engagement Strategies to Improve Employee Performance in Restaurants in Pune City

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Abstract:

Employee Engagement is the level of commitment and involvement as employee has towards his/her organization and its values. Employee Engagement essentially depicts the connection of employees to their work, organization, customers, and their efforts to results. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization. This article studies the employee engagement activities in present hotel industry especially in Restaurants.

Employee Engagement:

Employee Engagement can be defined as the level of commitment and involvement as employee has towards his/her organization and its values.

Engagement at work was conceptualized by Kahn, (1990) as the 'harnessing of organizational members' selves to their work roles. In engagement, people spend and express themselves physically, cognitively, and emotionally for the duration of role performances.

Employee Engagement essentially depicts our connection to our work, our organization, our customers, our effort6s and to results. In any study comprising Employee Engagement the three aspects which are studied are:

1. Employees as unique entities in terms of their skill, abilities, attitudes and aspirations.
2. Employers in their role to create condition of engagement.
3. Relationship, trust and communication between employees across levels.

The second related construct to engagement in organizational behavior is the concept of flow advanced by Csikszentmihalyi (1975, 1990). Csikzentmihalyi (1975) defines flow as the 'holistic sensation' that, people feel when they act with total involvement. Flow is the state in which there is little distinction between the self and environment. When individuals are in Flow State little conscious control is necessary for their actions. Employee engagement is the thus the level of commitment and involvement an employee has towards their organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization. The organization must work to build up and cultivate engagement,

 ISBN: 978-81-910118-7-6

which requires a two-way relationship between employer and employee.' Thus Employee engagement is a barometer that determines the association of a person with the organization. Engagement is most closely associated with the existing construction of job involvement (Brown 1996) and flow (Csikszentmihalyi, 1990). Job involvement is defined as 'the degree to which the job situation is central to the person and his or her identity (Lawler & Hall, 1970). Kanungo (1982) maintained that job involvement is a 'Cognitive or belief state of Psychological identification. Job involvement is thought to depend on both need saliency and the potential of a job to satisfy these needs. Thus job involvement results form a cognitive judgment about the needs satisfying abilities of the job. Jobs in this view are tied to one's self image. Engagement differs from job in as it is concerned more with how the individual employees his/her self during the performance of his / her job. Furthermore engagement entails the active use of emotions. Finally engagement may be thought of as an antecedent to job involvement in that individuals who experience deep engagement in their roles should come to identify with their jobs. When Kahn talked about employee engagement he has given important to all three aspects physically, cognitively and emotionally. Whereas in job satisfaction importance has been more given to cognitive side. HR practitioners believe that the engagement challenge has a lot to do with how employee feels about the about work experience and how he or she is treated in the organization. It has a lot to do with emotions which are fundamentally related to drive bottom line success in a company. There will always be people who never give their best efforts no matter how hard HR and line managers try to engage them. "But for the most part employees want to commit to companies because doing so satisfies a powerful and a basic need in connect with and contribute to something significant". Organisations with high employee engagement are 78 % more productive and 40 % more proitable than those organisations with low levels of employee engagement. Public sector em- ployees are less likely to be advocates for their organisation than private sector staff. Employees those who work for engaging organisation feel proud to work for, managers who are more likely to listen and care for them, leaders who listen to and inspire them, teams that support each other. Employees are likely to perceive the deal they get from their employer as positive, and they get lower levels of stress and a better work life balance. Engaged employees will have a greater sense of well-being than those who are less engaged. They are more likely to be satisfied with their work, less likely to be sick and less likely to leave the organisation. 84% of highly engaged employees believe they can positively impact the quality of their organization's products, compared with only 31% of the disengaged. Engaged employees work with passion and feel a strong connection to their company. Moreover, 54% of employees are not engaged they go through each workday putting time but no passion into their work. Companies with highly engaged employees have almost four times the earnings-per-

share growth rate of similar terms with lower levels of engagement (Market research by Gallup, 2003). Engaged employees are 87% less likely to leave the organisation than the disengaged. The cost of high turnover among disengaged employees is significant; some estimates put the cost of re- placing each employee at equal to annual salary.

Employee Engagement in the Restaurants:

A restaurant prepares and serves food, drink and dessert to customers in return for money. Meals are generally served and eaten on premises, but many restaurants also offer take-out and food delivery services. Restaurants vary greatly in appearance and offerings, including a wide variety of the main chef's cuisines and service models.

Modern restaurants, as businesses dedicated to the serving of food, and where specific dishes are ordered by the guest and generally prepared according to this order, emerged only in 18th-century Europe, although similar establishments had also developed in China.

A restaurant owner is called a restaurateur; both words derive from the French verb restaurer, meaning "to restore". Professional artisans of cooking are called chefs, while preparation staff and line cooks prepare food items in a more systematic and less artistic fashion.

Typically, customers sit at tables, their orders are taken by a waiter, who brings the food when it is ready, and the customers pay the bill before leaving. In finer restaurants there will be a host or hostess or even a maître d'hôtel to welcome customers and to seat them. Other staff waiting on customers includes busboys and steward.

Restaurants often specialize in certain types of food or present a certain unifying, and often entertaining, theme. For example, there are seafood restaurants, vegetarian restaurants or ethnic restaurants. Generally speaking, restaurants selling food characteristic of the local culture are simply called restaurants, while restaurants selling food of foreign cultural origin are called accordingly, for example, a Chinese restaurant and a French restaurant.

In India also the restaurant system is very similar to the customs carried out all across the world. Higher end restaurants usually are less in number and employee trained and skilled staff. Whereas there are a large number of small restaurants which serve the bulk of the population and these restaurants usually make use of unskilled labor which is trained on the job. These restaurants come under the unorganized sector. There are various associations of these restaurants at the national, state and district level like National Restaurant Association of India (NRAI), Hotels and Restaurant Association (Western India), Association of Hotels and Restaurants (AHAR), Pune Restaurants and Hotels Association (PRAHA), etc. It is not mandatory to be a member of these associations, but a large number of them become its members because these associations provide the necessary support and acts as a voice to put its grievances forward to the concerned authorities.

In the Restaurant business Employee Engagement may have different importance

 ISBN: 978-81-910118-7-6

when compared to its uses in other businesses. This study makes use of small Restaurants used for Food. This industry usually recruits people either through walk-ins or through referrals. Walk-in method is usually used to recruit workers for service and Service jobs, whereas the method of referrals is used for recruiting of important skilled and managerial employees. Also this industry believes in promoting their in house staff as the workers are already accustomed to the working conditions and are trained to conducted the duties that are required

Training usually provided to the employees is on the job training, as a result the workers learn when they are working. Employee Engagement has become important in this industry due to the shortage of employees, hence this industry is in desperate need for loyal employee who work with commitment.

Objectives Of The Study:

- To analyse the employee engagement drivers
- To study the employee engagement strategies in Restaurants in Pune city,
- To suggest certain measures for enhancing the employee engagement for organizational success.

Research Methodology:

Sampling Design:

The population comprised of Owners/ Managers of Restaurants in Pune City. Convenient sampling was used as technique for the sampling process. The Restaurants that were chosen were small to medium restaurants having a population of around 20-50 employees. The sample size consisted of a total of 20 samples.

Sources and Method of Data Collection:

Primary Data:

The primary data was collected through questionnaire that was used for this field work consisted of 9 questions. The question have been modified to comply with the needs of the study, also to make them more related to the management of Restaurants.. The questionnaire includes close ended questions and proper care was taken to minimize ambiguity. Primary data was also collected by interview method. Unstructured interviews were conducted with the Owners/Managers of the Restaurants.

Secondary Data:

The secondary data was collected through the means of information available on the internet and the existing literature available on the subject.

Limitations of the Study:

The study is confined to a smaller geographical area, so we may say that it cannot be applicable everywhere.

We assume that all the respondents i.e. the management of Restaurants are well aware about the parameters of the topic. Also there is possibility that wrong information may be given by the respondents.

Data Analysis:

The data analysis was done on the basis of the Gallup questionnaire.

1. Is the Management of Restaurants aware about Employee Engagement

The Management of the restaurants was asked whether they are aware about Employee Engagement.

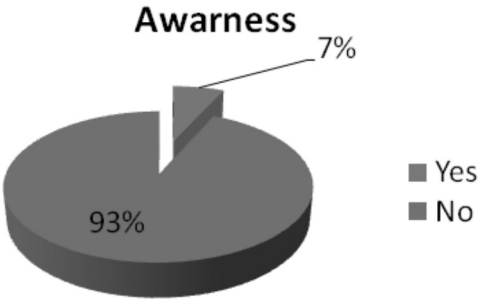

CHART: 1 Awareness about Employee Engagement

According to the study conducted, it was found that out of the total of 30 owners/ Managers of the restaurants, 2 have claimed to know what employee engagement is whereas 28 have no knowledge of the same. Thus according to this graph 07% of the Restaurant management has knowledge and the remaining 93% of Restaurant management doesn't have the knowledge of employee engagement. Thus we can say that majority of the Management has no knowledge of Employee Engagement.

2. Does the Management provide career advancement opportunities to its employees

The Management of the Restaurants was asked whether they provide career advancement opportunities to their employees.

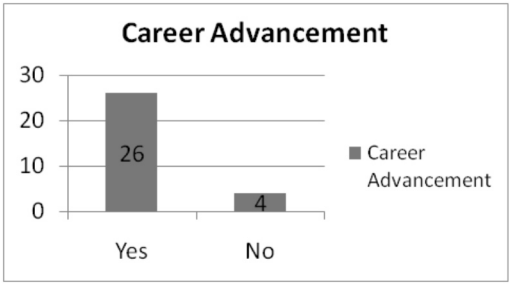

CHART: 2 Career advancement opportunities to its employees

Similarly from the data collected it was found that, out of the management in the Restaurants, 26 (86.66 %) have claimed to provide career advancement opportunities to their employees whereas 04 (13.33 %)do not provide the same. Thus we can say that majority of the Service staff provide career advancement opportunities to their employees within the restaurant.

3. Does the Management provide feedback to the employees regarding performance.

The Management of the Restaurants was asked whether they provide feedback to the employees regarding performance within the restaurant.

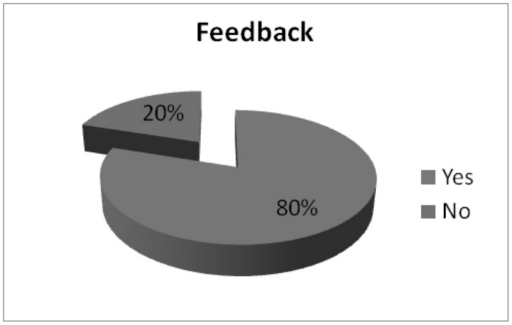

CHART: 3 Feedback to the employees regarding performance

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According to the study conducted, it was found that out of the total of 30 Management representatives of Restaurants, 24 have claimed to have provided feedback to the employees regarding performance whereas 6 do not provide such feedback. Thus according to this graph 80 % of the Management provides feedback and the remaining 20 % of Management doesn't provided feedback to the employees regarding performance. Thus we can say that majority of the Management provided feedback to the employees regarding performance within the restaurant.

4. Does the Management feel that the employees have a friendly environment to work.

The Management of the Restaurants was asked whether they feel that the employees have a friendly environment to work in the restaurant.

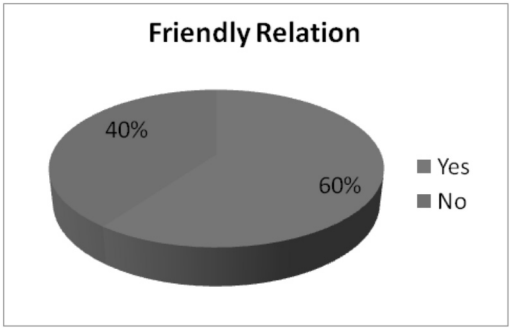

CHART: 4 Friendly environment to work

According to the study conducted, it was found that out of the total of 30 30 Management representatives of Restaurants, 18 have claimed, they feel that the employees have a friendly environment to work, whereas 12 do not feel the same. Thus according to this graph 60 % of the Management of restaurants feel that the employees have a friendly environment to work and the remaining 40 % of the Management do not feel that the employees have a friendly environment to work. Thus we can say that majority of the Management of restaurants feel that the employees have a friendly environment to work within the Restaurant.

5. Are the Employees aware of the goals and objectives of the organization.

The Management of the Restaurants was asked whether the Employees are aware of the goals and objectives of the organization.

CHART: 5 Employees aware of the goals and objectives of the organization

Similarly from the data collected it was found that, out of the Management representative of the Restaurants, 3 (10 %) consider that employees are aware of the goals and objectives of the organization whereas 27 (90 %)do not consider the same. Thus we can say that majority of the Management consider that the employees are aware of the goals and objectives of the organization.

6. Does the Management provide an open door policy, where employees can provide suggestions.

The Management of the Restaurants was asked whether they provide an open door policy, where employees can provide suggestions.

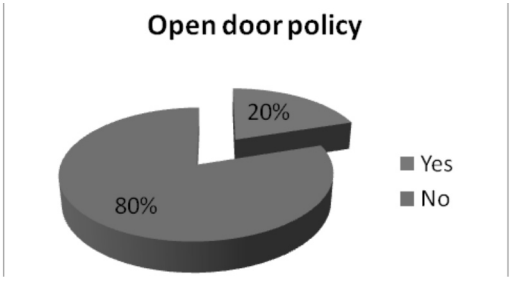

CHART: 6 Provide an open door policy.

Similarly from the data collected it was found that, out of the Management representative of the Restaurants, 6 (20%) consider that they provide an open door policy, where employees can provide suggestions, whereas 24 (80%) do not consider the same. Thus we can say that majority of the Management don't consider that they provide an open door policy, where employees can provide suggestions.

7. Does the Management provide any reward or incentive for good performance.

The Management of the Restaurants was asked whether, they provide any reward or incentive for good performance of the employees.

CHART: 7 Reward for Good performance

According to the study conducted, it was found that out of the total of 30 Management representative of the Restaurants, 9 have claimed that they provide reward or incentive for good performance of the employees, whereas 21 have claimed they do not provide any reward or incentive for good performance of the employees. Thus according to this graph 30 % of the Management have claimed that they provide reward or incentive for good performance and the remaining 70 % of the Management claimed that they do not provide reward or incentive for good performance. Thus we can say that majority of the Management claimed that they do not provide reward or incentive for good performance.

8. Factor considered by management as important to improve performance

The Management of the Restaurants was asked which factor will help in improving the performance of the employees of restaurant.

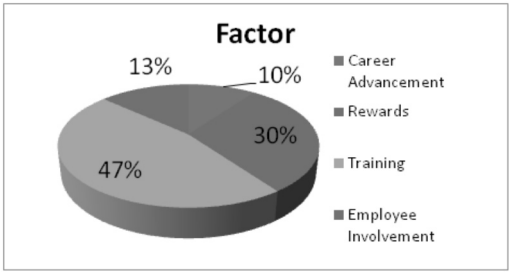

CHART: 8 Factor in improving the performance of the employees of restaurant

Similarly from the data collected it was found that, out of the Management in the Restaurants, 14 feel that training will help to improve the performance of the

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employees of restaurant, 9 feel that rewards will help to improve the performance, 4 feel that employee involvement will improve performance and 3 feel that career advancement will help to improve the performance of employees of restaurants. Thus majority of management feel that training will help to improve the performance of the employees of restaurants.

9. Does the Management consider there is a relation between Employee performance and Organizational Development.

The Management of the Restaurants was asked whether there is a relation between Employee performance and Organizational Development.

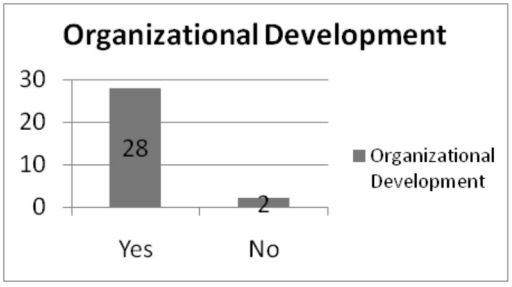

CHART: 9 Relation between Employee performance and Organizational Development.

According to the study conducted it was found that, out of the Management representatives of the Restaurants, 28 (93.33 %) have claimed that there is a relation between Employee performance and Organizational Development, whereas 2 (6.66 %)do not feel to the same. Thus we can say that majority of the Management feel that there is a relation between Employee performance and Organizational Development.

Drivers of Engagement:

Robinson et al (2004) state that drivers of engagement can be a useful pointer to organisations towards those aspects of working life that require serious attention if engagement levels are to be maintained or improved. It is clear that the organisation has a responsibility to lead engagement, and there are several key areas the organisation can address to encourage engagement among its employees. Leadership, effective management, open, two-way communication, pay and benefits, fair and equal treatment, employing the 'right' workforce, career development and training, working hours, and health and safety are all aspects of the work environment that organisations can control and influence and have been found to impact upon engagement levels. However, there is no 'one size its all' model of engagement, and different employees will place different emphases on the extent to which they value each of these elements in return for 'going the extra mile'.

Figure 1: Model of the Drivers of Employee Engagement

Source: Robinson et al (2004)

While it is possible to measure engagement itself through employee

surveys, this does not assist in identifying areas for improvement within organisations. There are a range of factors, known as drivers that are thought to increase overall engagement. By managing the drivers, an organisation can effective- ly manage engagement levels of its employees. Drivers such as communication, performance clarity and feedback, organizational culture, rewards and recognition, relationships with managers and peers, career development opportunities and knowledge of the organization's goals and vision are some of the factors that facilitate employee engagement. Some points from the research are presented below:

- Employee perceptions of job importance ".An employee's attitude toward the job's importance and the company had the greatest impact on loyalty and customer service then all other employee factors combined."
- Employee clarity of job expectations - "If expectations are not clear and basic materials and equipment are not provided, negative emotions such as boredom or resentment may re- sult, and the employee may then become focused on surviv- ing more than thinking about how he can help the organization succeed."
- Career advancement/improvement opportunities - "Plant supervisors and managers indicated that many plant improvements were being made outside the suggestion system, where employees initiated changes in order to reap the bonuses generated by the subsequent cost savings."
- Regular feedback and dialogue with superiors - Feed- back is the key to giving employees a sense of where they're going, but many organizations are remarkably bad at giving the words like 'Thanks, You did a good job, etc.'
- Quality of working relationships with peers, superiors, and subordinates - "... if employees' relationship with their managers is fractured, then no amount of perks will persuade the employees to perform at top levels. Employee engagement is a direct reflection of how employees feel about their relationship with the boss."
- Perceptions of the ethos and values of the organization - "Inspiration and values' is the most important of the six drivers in the Engaged Performance model. Inspirational leadership is the ultimate perk. In its absence, [it] is un- likely to engage employees."
- Effective internal employee communications - which con- vey a clear description of "what's going on". If the organisation accept that employees want to be involved in what they are doing then this trend is clear. The effect of poor internal communications is seen as its most destructive in global organisations which suffer from employee annexation - where the head office in one country is buoyant but its annexes are disengaged. In the worst case, employee annexation can be very destructive when the head office attributes the annex's low engagement to its poor performance… when its

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poor performance is really due to its poor communications.

- Reward to engage - Look at employee benefits and ac- knowledge the role of incentives. “An incentive to reward good work is a tried and test way of boosting staff morale and enhancing engagement.” There are a range of tactics you can employ to ensure your incentive scheme hits the mark with your workforce such as: Setting realistic targets, selecting the right rewards for your incentive program, communicating the scheme effectively and frequently, have lots of winners and reward all achievers, encouraging sustained effort, present awards publicly and evaluate the incentive scheme regularly

Findings & Conclusion:

Findings

- Majority of the Management has no knowledge of Employee Engagement.
- Majority of the Service staff provide career advancement opportunities to their employees within the restaurant.
- Majority of the Management provided feedback to the employees regarding performance within the restaurant.
- Majority of the Management of restaurants feel that the employees have a friendly environment to work within the Restaurant.
- Majority of the Management consider that the employees are aware of the goals and objectives of the organization.
- Majority of the Management don’t consider that they provide an open door policy, where employees can provide suggestions.
- Majority of the Management claimed that they do not provide reward or incentive for good performance.
- Majority of management feel that training will help to improve the performance of the employees of restaurants.
- Majority of the Management feel that there is a relation between Employee performance and Organizational Development.

Suggestions:

- The management of the Restaurants has to take keen interest in improving the Employee Engagement of the Service Staff.
- The management of the Restaurants has to put in effort for the recognition of the Service staff, by providing aspects like certificates or even appreciative words.
- The Managerial and supervisory staff should encourage the employees for their development. This can be done by providing additional training for their career development.
- The management of the Restaurants has to put in time to make the employees understand the nature of business. Also

give them a sense of pride by making them understand, how important their work is for the industry.

- The management of the Restaurants should ensure the employees have an opportunity to learn and grow.

Future of the Industry:

The Restaurant industry if it wants to function as it has always been doing, then it should implement the solution as stated above or else it would become difficult to handle the situation of shortage of labor.

The option is for the Restaurants to improve their standard there by recruiting fresher from hotel management institutes. This would lead to improvement of the quality of service as well as the customers but this would involve a lot of investment for the owners of the Restaurants.

Conclusion:

This study has showed the Employee Engagement in Restaurants. The Employers are unaware about employee engagement activities, but to some extend do conduct activities related to Employee Engagement. The management does recognize that employee performance is important for organizational development. Employee Engagement will certainly help in improving the performance of the employees thereby enhancing organizational development. Also this industry requires the initiative of the associations so that they help the industry to deal with problems of labor shortage. This will work for the betterment of the industry in future.

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ISBN: 978-81-910118-7-6

A Qualitative Study of Impact of Social Networking Sites (SNS) in Developed and Developing Countries

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Abstract:

The main aim of this paper is to understand the perception of the previous researchers and to know the research methodology adopted by them in finding out the answer whether the social networking sites are boon or bane for today's society and how are they affecting the society as a whole. One side these sites provide to communicate with our dear ones on the others side it creates platform for the various organization for developing their business. The new media is growing so fast that it makes it imperative for employees to embrace the medium and there is no doubt these SNS provides employment, marketing, personal growth, sharing of information..Social networking site is all about awareness and connection, and presently the social networking site (SNS) seems to be the mantra that affects the productivity of employee in the workplace. The conceptual paper examines positive and negative impact of social networking sites on youths, provides the relationship between social networking and employee productivity and examines whether social networking are capable of increasing the levels of employee performance and satisfaction and also the impact of these sites on the society.

Introduction:

Social media is a popular trend today, especially among college students. Businesses are always looking for new ways to reach customers, especially ones ready to enter the work force. Social networking is a way in which many individuals come together and form many sized groups. These groups may be big, small, formal, informal, intentional or unintentional. When organized method through which groups are formed, help is acquired, information is conveyed, and actions are taken to achieve certain outcomes. When it comes to online social networking, sites are commonly used. These sites are known as social networking sites (SNS). SNS has led to fundamental changes in the ways people interact with both the employee and organization. There are various factors which have prompted us to consider the implications of these social networking sites on present youth, employees and the whole organizations.. One of these is the willingness of users to embrace SNS as a means of communication and social networking in everyday life. The increasing dependence on technology for basic communication also highlights the importance of analysing how SNS are affecting daily processes. Sites like Face book, twitter, Myspace and LinkedIn are influencing the way users establish, maintain and cultivate a range of social

 ISBN: 978-81-910118-7-6

relationships, from close friendships to casual acquaintances.

The research is analysis of the various researches that has already been taken by the various researchers. So basically this research paper is a study of the impact of SNS across the globe on various parameters and emphasis was placed on comparative analysis of these usage of social networking sites between developed and developing countries. In this research article, we have taken into comparisons are impact of SNS on education of students, on youth in general, on the personal life of people from different strata of society, also its impact on their social life, and on the productivity, employment, employment relations and the overall business of an organization.

Research Methodology:

Objectives:

In this study, a quantitative research survey was created to analyze the effect of Social media worldwide. A comparative study was to be made between the researches that have already been done in different countries. Majorly comparison was made between the developing and developing countries. Thus 28 papers were selected on the basis of convenience from the internet and studied well for the analyses.

The main objective of this research is as follows:

1. To know the research methodologies adopted by the earlier researchers.
2. To do a comparative study between the research papers of developed countries and those of developing countries.

Limitations:

Several limitations were present in the study. First, the data were collected via convenience, the most convenient and easily accessible source being Internet. Although convenience samples provide time advantages, they maybe biased and may not represent the entire number of research papers done on this topic. As the papers were selected conveniently over the net we could get only those which were available on the net.

Research Design:

In this paper we have used the non-experimental designs. Non-experimental research designs do not involve a manipulation of the situation, circumstances or experience of the participants.

To meet the objectives of our research paper we have used the comparative research design wherein we have compared the conclusions of developing (19 papers) and developed countries (9 papers).

Below is shown the table showing the types of research methodologies used by the authors of different countries.

		Research methodology						
		Primary				Secondary		
	Paper No.	Questionnaire	web mailing	telephonic interview	Snowballing	Internet	Journals	Books
Developing countries	1	1	-	-	-	-	-	-
	2	-	-	-	-	1	1	1
	3	1	-	-	-	-	-	-
	4	1	-	-	-	-	-	-
	5	1	-	-	-	-	-	-
	6	-	-	-	-	1	1	-
	7	1	-	-	-	-	-	-
	8	1	-	1	-	-	-	-
	9	1	1	1	-	-	-	-
	10	1	-	1	-	-	-	-
	11	1	-	1	-	-	-	-
	12	1	1	-	-	1	1	1
	13	1	-	-	-	-	-	-
	14	1		-	-	-	-	-
	15	-	-	-	-	1	1	-
	16	1	-	-	-	-	-	-
	17	1	1	-	-	1	1	
	18	-	-	-	-	1	1	1
	19	-	1	-	-	1	1	-
Total		14	4	4	0	7	7	3
		22				17		

Thus it is clearly seen that mostly Primary method of data collection is utilized for the research purpose. In the case of 73.48% research papers respondents were asked to fill questionnaires manually and in remaining 21% papers strategies for data collection used were web mailing or telephonic interviews. For some papers only secondary data collection was done using Internet, journals or books whereas for some combination of both Primary & secondary data collection methods were used.

		Research methodology						
		Primary				Secondary		
	Paper No.	Questionnaire	web mailing	telephonic interview	Snowballing	Internet	Journals	Books
Developed countries	1	1	-	-	-	-	-	-
	2	-	-	-	-	1	1	1
	3	1	-	-	-	-	-	-
	4	-	-	-	-	1	1	1
	5	1	-	-	-	-	-	-
	6	1	1	-	1	1	1	-
	7	1	-	-	-	-	-	-
	8	-	-	-	-	1	1	1
	9	-	-	-	-	1	1	-
Total		5	1	0	1	5	5	3
		7				13		

 ISBN: 978-81-910118-7-6

Again in case of research papers in developed countries first hand data collection through questionnaire seems to be used by 55.55% of the researchers. They also used internet, journals and books for their secondary data collection methodology.

Analysis of data:

It is seen that out of the total 29 research papers 14 papers were written with respect to the impact of Social networking sites on Students or youth. In case of developing countries following conclusions are drawn from the research papers analysis:

Social networking sites have both positive as well as negative impact on the education of youth. Maximum (50%) researchers have concluded that use of social sites have an adverse effect on the minds of students. Around 40% of them conclude that these sites are useful for increasing knowledge and for academic purpose. Also students use them to expand their social network and stay in touch with their existing friends. Very few researchers (20%) have highlighted the point that the grades of students are affected due to the distractions caused by such sites. Only 10% researchers talk about the impact on job opportunities due to excessive use of SNS.

	Impact of SNS on Students/Youth											
	Developing Countries											
	1	2	3	4	5	6	7	8	9	10	Total	%
	Paper 1	Paper 4	Paper 5	Paper 7	Paper 11	Paper 13	Paper 14	Paper 15	Paper 17	Paper 19		
Adverse effect		Y		Y			Y	Y		Y	5	50
Grades					Y		Y				2	20
Distraction								Y		Y	2	20
Usefull for studying/ knowledge	Y			Y		Y			Y		4	40
Social development												0
Improvement in Communication / other skills				Y					Y		2	20
Increase network of friends & family	Y		Y		Y				Y		4	40
Security issues			Y	Y				Y			3	30
Addiction					Y					Y	2	20
Positive effect		Y				Y			Y		3	30
Job opportunities							Y				1	10

In case of Developed countries the observations are as follows:

In all only six papers have been written on the effect of SNS on personnel and social lives of the individuals in both developing and developed countries. In case of developed countries the results are as follows:

Maximum researchers (75%) have focused on how these sites help in increasing the social network of the students. 50% of Researchers suggested that SNS has

the potential to increase the student engagement which could lead to improved student achievement,cognitive skills & skill development. Only 25% say it affects the youth privacy, safety, psychological well-being, social development & academic performance. Only 1 paper out of four focuses on the social use of networking sites.

Researches from Developed countries show that the maximum use of SNS is for the personnel use and to increase the social networking of an individual. People are more familiar with the use of SNS and look forward to connect to the people worldwide. Conclusions are also made such that people use the networking for their business purpose as well.

	Impact of SNS on Students/Youth Developed Countries					
	1	2	3	4	Total	%
	Paper 2	Paper 3	Paper 4	Paper 5		
Adverse effect	Y				1	25
Grades	Y			Y	2	50
Distraction			Y		1	25
Usefull for studying	Y			Y	2	50
Social development		Y			1	25
Improvement in Communication / other skills	Y	Y			2	50
Increase network of friends & family		Y	Y	Y	3	75
Security issues			Y		1	25
Addiction					0	0
Positive effect	Y				1	25
Job opportunities					0	0

Impact of Social networking sites on Personnel and social life:

A considerable amount of the researchers (50%) indicated that people have had bad experience of bullying, unwanted contact & the posting of inappropriate or distressing information over the SNS. But also the same percentage of researchers concluded that it had positive impact on their lives as they could connect to anybody globally which also gave them a way to relieve their daily stress. Only 25% researchers have commented on the use of SNS for social purpose and found that mostly women are more sensitive towards social issues than men. Few papers (50%) also focused on the use of SNS for business purpose in order to stay in touch with their customers or dealers.

 ISBN: 978-81-910118-7-6

	Impact of SNS on personnel & social Life					
	Developing Countries					
	1	2	3	4	Total	%
	Paper 3	Paper 6	Paper 8	Paper 12		
Use for bussiness			Y	Y	2	50
use for social purpose	Y				1	25
Negative impact		Y		Y	2	50
Positive impact		Y	Y		2	50
Increase network of friends & family		Y		Y	2	50

Out of the total 28 papers only two papers were studied with respect to the Impact of social networking sites on personnel and social life in developed countries. Both the papers suggest that

Social networking sites have led to a different way of communicating with others, both with those previously known to the person as well as newly formed friendships.

Past studies have suggested that online social networking may be particularly helpful for those who are shy and less sociable as it provides an easier way for them to form connections with others. Survey participants completed a shyness and sociability scale and largely fell in the normal range of shyness and sociability with few people falling at the extreme ends. Further, as sociability increased so did time spent using social networking sites, indicating that patterns of social behavior that occur in real life are replicated online.

	social Life			
	Developed Countries			
	1	2	Total	%
	Paper 6	Paper 7		
Use for bussiness		Y	1	50
use for social purpose		Y	1	50
Negative impact	Y		1	50
Positive impact			0	0
Increase network of friends & family	Y	Y	2	100

Impact of Social Networking sites on Business:

Developing countries have realized the significant role played by SNS in advertisement of the product in present scenario and have started using SNS as a tool for advertisement, sales promotion, job opportunities and employee relations.

	Impact of SNS on business Developing Countries					
	1	2	3	4	Total	%
	Paper 2	Paper 9	Paper 16	Paper 18		
for advertisement	y	y	y		3	75
brand awareness		y			1	25
employee performance and satisfaction				y	1	25
business network expansion			y		1	25
job opportunities			y		1	25
sales and promotion					0	0

With the growth of SNS significant change is seen in the advertisement industry in developed countries. They are using SNS as an advertising channel and are promoting their sales by making maximum brand awareness with the help of SNS which is directly leading to job opportunities.

	Impact of SNS on business Developed Countries					
	1	2	3		Total	%
	Paper 1	Paper 8	Paper 9			
for advertisement	y	y	y		3	75
brand awareness					0	0
employee performance and satisfaction		y			1	25
business network expansion					0	0
job opportunities					0	0
sales and promotion	y				1	25
employee relations		y			1	25

 ISBN: 978-81-910118-7-6

Conclusion:

The main purpose of this research was 1.To know the research methodologies adopted by the earlier researchers.2.To do a comparative study between the research papers of developed countries and those of developing countries. From the analysis done it's been observed that most of the researchers of both developed and developing countries have opted Primary data collection method. Person assisted methods of questionnaire and telephonic interviews were commonly used to get the first hand information. For the Secondary data collection researchers have taken the reference from internet, national and international journals and related books. However researches based on secondary data were less as compared to those based on primary data.

From the analysis over the impact of SNS on the students or youth it can be concluded that developed countries students use SNS mainly for developing their personnel network, communication skills and for gaining knowledge. This suggests that it has an overall positive impact and the negative impact of SNS usage is negligible. Developing countries concentrate more on the educational impact suggesting that it has an adverse effect on the students affecting their grades and overall academic performance.

The impact of social networking sites on the both the developed and developing countries in terms of personnel and social life is almost the same, the only difference is that there is more of negative impact on personal life such as bullying, requests from unwanted contact & the posting of inappropriate or distressing information among the people of developed countries than those of developing countries.

In both the countries SNS is used by the organizations for advertisements and for sales and promotions. SNS is also used as a tool for maintaining good employment relations. The only difference between the developed and developing countries is that developed countries use it as a medium for business expansion whereas developing countries are lagging behind in it.

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International Journal of Scientific & Engineering Research Volume 3, Issue 9, September-2012 1 ISSN 2229-5518

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ISBN: 978-81-910118-7-6

Intellectual Property Rights: A Study of a Few Asian Countries

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Introduction:

Intellectual property right is a broad term used to cover patents, trade marks, plant breeders rights, copyright, trade secrets and other types of rights that the law gives for the protection of investment in creative effort and knowledge creation. The question of how intellectual property rights (IPRS) affect the processes of economic development and growth is complex and based on multiple variables. The effectiveness of IPRS in this regard depends considerably on particular circumstances in each country. This project mainly deals with the co-relation between IPRs and economic development of the world. The researcher has further studied the IPR status in India and its contribution to Indian economic environment.

Importance of Intellectual Property:

Intellectual property protection is the key factor for economic growth and advancement in the high technology sector. They are good for business, benefit the public at large and act as catalysts for technical progress. Whether IPRs are a good or bad thing, the developed world has come to an accommodation with them over a long period.

Objective of the Study:

This study proposes to generate critical information and conceptual knowledge on the implications of IPR on economic development in developing countries. Specifically, it provides

1. An overview of the Intellectual Property Rights.
2. The status of intellectual property rights implementation in few selected Asian countries.

Research Methodology:

This paper is based on the review of existing literature on the subject. This paper is Non-Doctrine in nature where in the data has been collected from books, research journals & various AIRs. A conceptual analysis of issues, challenges and alternative options available to the nations while implementing IPRs and the post effects of the same on the nations' economic environment was carried out.

IPR: An Over View:

Intellectual property refers to creations of the mind: inventions; literary and artistic works; and symbols, names and images

 ISBN: 978-81-910118-7-6

used in commerce. Intellectual property is divided into two categories:

A. Industrial Property includes patents for inventions, trademarks, industrial designs and geographical indications.

B. Copyright covers literary works (such as novels, poems and plays), films, music, artistic works (e.g., drawings, paintings, photographs and sculptures) and architectural design. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and broadcasters in their radio and television programs.

Types of Intellectual Property Rights:

- **Copyrights:** A copyright is a form in intellectual property that protects the original authors of both published and unpublished creations. The rights of authorship for these works remain solely the possessions of the originator for a specified period of time under copyright law. Once the time period has elapsed, then these works are open to others for reproduction and republication. Copyright laws grant authors, artists and other creators protection for their literary and artistic creations, generally referred to as "works".
- **Patents:** Patents are legal property rights applied to inventions (as opposed to works of any kind of art or literacy), and they must be distributed by the United States Patent and Trademark Office. Typically, patents apply to such items as processes, machines, manufacturing designs, biological discoveries, or "compositions of matter."
- **Trade Secrets:** Trade secrets are practices, designs, formulas, processes, recipes, or ideas used by a company that allows it to gain leverage in its industry. Typically, trade secrets are kept hidden by one's own means, as opposed to being protected through government policies such as patents or copyrights.
- **Trademarks:** Trademarks include any words, phrases, symbols, logos, designs, or devices that are used in association with a particular brand or good in order to distinguish it from other products of that industry. Trademarks are used for identification purposes, and are legally protected once they have been registered with the United States Patent and Trademark Office.
- **Industrial Design:** An industrial design refers to the ornamental or aesthetic aspects of an article. A design may consist of three-dimensional features, such as the shape or surface of an article, or two-dimensional features, such as patterns, lines or color.
- **Geographical Indication:** A geographical indication is a sign used on goods that have a specific geographical origin and possess qualities or a reputation due to that place of origin. Most commonly, a geographical indication consists of the name of the place of origin of the goods.

IPR and Economic Development:

The impact of intellectual property laws on national economic development is complex and poorly understood. With limited success, studies have attempted to analyze the degree to which intellectual property protection and enforcement spurs development and the point at which it ceases to contribute, or worse, hinders development. Prior to the adoption of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement), the lack of harmonization in intellectual property protection across countries enabled analysis of locational determinants for investment and knowledge transfer. The TRIPS Agreement created an international enforcement mechanism for IPR and obligated World Trade Organization (WTO) members to provide minimum standards of protection of IPR.3 The agreement gave developing countries an additional five years from the date of entry into force of the TRIPS Agreement (i.e. until January 1, 2000) to meet certain obligations and an additional ten years in specified circumstances.4 Furthermore, the agreement does not obligate countries that qualify under the WTO as "least developed countries" (LDCs) to protect IPR in accordance with the TRIPS Agreement until 2013 or later in certain cases.5 Yet, for those LDCs that border economies.

There are two central economic objectives of any system of intellectual property protection. The first is to promote investments in knowledge creation and business innovation by establishing exclusive rights to use and sell newly developed technologies, goods, and services. Absent such rights, economically valuable information could be appropriated without compensation by competitive rivals. Firms would be less willing to incur the costs of investing in research and commercialization activities. In economic terms, weak IPRS create a negative dynamic externality. They fail to overcome the problems of uncertainty in R&D and risks in competitive appropriation that are inherent in private markets for information. The second goal is to promote widespread dissemination of new knowledge by encouraging (or requiring) rights holders to place their inventions and ideas on the market. Information is a form of public good in that it is inherently non-rival and, moreover, developers may find it difficult to exclude others from using it. In economic terms it is socially efficient to provide wide access to new technologies and products, once they are developed, at marginal production costs. Such costs could be quite low for they may entail simply copying a blueprint or making another copy of a compact disk or video.

Positive Impacts of IPRS on Economic Development:

Intellectual property rights could play a significant role in encouraging innovation, product development, and technical change. Developing countries tend to have IPRS systems that favor information diffusion through low-cost imitation of foreign products and technologies. This policy stance suggests that prospects for domestic invention and innovation are insufficiently developed to warrant protection. To become competitive, enterprises in developing

 ISBN: 978-81-910118-7-6

countries typically must adopt new management and organizational systems and techniques for quality control, which can markedly raise productivity. Such investments are costly but tend to have high social returns because they are crucial for raising productivity toward global norms. They are more likely to be undertaken in an environment where risks of unfair competition and trademark infringement are small. Moreover, IPRS could help reward creativity and risk-taking among new enterprises and entrepreneurs.

An example of this process is that protection for utility models has been shown to improve productivity in countries with lagging technologies. In Brazil, utility models helped domestic producers gain a significant share of the farm-machinery market by encouraging adaptation of foreign technologies to local conditions .

Recent studies suggest that innovation through product development and entry of new firms is motivated in part by trademark protection, even in poor nations. A survey of trademark use in Lebanon provided evidence on this point. Lebanon has an extensive set of intellectual-property laws but they are weakly enforced. Firms in the apparel industry claimed to have a strong interest in designing apparel of high quality and style aimed at Middle Eastern markets. Such efforts have been frustrated by trademark infringement in Lebanon and in neighboring countries. This problem was yet larger in the food products sector, where legitimate firms suffered from rivals passing off goods under their trademarks. The problem has seriously hampered attempts to build markets for Lebanese foods in the Middle East and elsewhere. Related difficulties plagued innovative producers in the cosmetics, pharmaceuticals, and metal products sectors. Thus, local product development and establishment of new firms have been stifled by trademark infringement targeted largely at domestic enterprises.

Similar comments apply to copyrights. Copyright industries, such as publishing, entertainment, and software, are likely to be dominated by foreign enterprises (which can absorb temporary losses and afford the costs of deterring infringement) and pirate firms in countries with weak protection and enforcement. Thus, lower-quality copies would be widely available but the economy's domestic cultural and technological development would be hampered. This situation was clear in the Lebanese survey. Lebanon has a small but vibrant film and television industry that could successfully export to neighboring economies if those countries engineered stronger copyright protection. In China, the domestic software industry has grown rapidly in the area of particular business applications, which did not suffer extensive unauthorized copying, but has faced obstacles in developing larger and more fundamental programs. Thus, domestic commercial interests in stronger copyrights have emerged and are now playing a role in promoting enforcement. Intellectual property rights also could stimulate acquisition and dissemination of new information. Patent claims are published, allowing rival firms to use the information in them to develop further inventions. There are three interdependent

channels through which technology is transferred across borders. These channels are international trade in goods, foreign direct investment (FDI) within multinational enterprises, and contractual licensing of technologies and trademarks to unaffiliated firms, subsidiaries, and joint ventures. Economic theory finds that technology transfers through each channel depend in part on local protection of IPRS, albeit in complex and subtle ways.

Quality assurance is important for safeguarding the interests of consumers. However, widespread distribution of counterfeit products can ruin reputations achieved at considerable cost, a problem that can be overcome only with additional investments. For example, in food products, beverages, cosmetics, and medicines, counterfeit products can be hazardous for consumers. Thus, the incentives generated for R&D focused on diseases of poor countries could be significant. While this is a crude calculation, it suggests that pharmaceutical firms could anticipate higher profits in developing nations, some portion of which could be devoted to research on their endemic diseases.

Negative Impacts of IPRS on Economic Development:

While strengthening IPRS bears potential for enhancing growth and development in the proper circumstances, it might also raise difficult economic and social costs. Indeed, developing economies could experience net welfare losses in the short run because many of the costs of protection could emerge earlier than the dynamic benefits discussed above. This situation explains why it is often difficult to organize interests in favor of reform in developing countries.

In most developing economies there are significant amounts of labor employed in copying unauthorized goods. As these nations upgrade their laws and enforcement activities, these workers must find alternative employment. This displacement problem should pose the initial challenge for policymakers in introducing stronger IPRS.

The provision of product patents in pharmaceuticals, agricultural chemicals, and biotechnology, along with plant breeders' rights, should confer greater market power on rights holders. Such firms might then reduce sales to establish monopolistic prices in key medical therapies and industrial and agricultural inputs.

However, the extent to which such price increases would emerge depends on several variables, such as the competitiveness of the local pharmaceutical market, the share of drug production that is copied from patentable drugs, and the elasticity of demand for medicines. Evidence from India suggests that pre-patent market structures are relatively competitive because there are significant imitative capacities. Moreover, there could well be a significant degree of market power engendered in the pharmaceutical industries in developing economies, after the introduction of patents, through product differentiation and marketing.

A fundamental concern raised about IPRS is that their exploitation could result

 ISBN: 978-81-910118-7-6

in diminished access to technological information. As suggested above, pharmaceutical and biotechnological patents could raise imitation costs and place considerable pressures on imitative enterprises in developing economies. Improving trade-secrets protection should make it more difficult to acquire technologies through misappropriation. Copyright protection would make it more difficult to copy computer software.

Such potential costs explain the reluctance of many developing economies to strengthen their regimes. However, they must be placed into broader perspective. First, these costs would be counterbalanced by greater incentives for technology transfer through trade, FDI, and licensing as discussed earlier. Indeed, it is likely that many local pharmaceutical firms would find it advantageous to reach production and technology-sharing agreements with international enterprises. Second, stronger IPRS would improve prospects for innovative enterprises in developing nations to enter markets and develop new products. Third, rising imitation costs need not be damaging if IPRS are introduced into a competitive economy in which firms have the ability to choose among many potential suppliers of technology and products.

IPR and Asian Countries:

The rapid growth at the rate of 5.5 per cent in per capita GDP sustained over the 1960-90 and even more impressive growth rate exports in the East Asian economies, viz. Japan; South Korea, Taiwan, Hong Kong and Singapore (first tier Asian nies), Malaysia, Thailand, and Indonesia (second tier nies) and China, generally termed as the 'East Asian Miracle', has attracted a large volume of literature. While some analysts have attempted to dismiss the East Asian achievement as a result of factor accumulation along the production function, voluminous empirical evidence is now available to corroborate that a substantial proportion of East Asian growth was contributed by growth of total factor productivity (TFP) that has averaged between 2 to 4 per cent per year over 1960-89 thus contributing over a third of the growth of output in these countries. Furthermore, evidence is now available to confirm that the assimilation of foreign technology was a 'critical component of the Asian Miracle'. There seems to be a general consensus that the East Asian success owes a lot, in general, to their ability to imitate, absorb, assimilate, replicate or 'duplicative imitation' of foreign inventions. The existing evidence on the role of IPRs regime in promoting growth is largely anecdotal. Although the literature is not explicit in acknowledging its role, the soft IPP regime adopted by these countries in the period of duplicative imitation or reverse engineering has played and important role in facilitating the firm level technological learning as becomes clear from the case studies of Japan, Korea and Taiwan.

Implications of the TRIPs Regime for Developing Countries:

The full implementation of the TRIPs Agreement is likely to have an important bearing on the patterns of development in developing countries. The process of

acquisition of local technological capability by developing countries is likely to suffer a set back. The strengthening of IPRs regime may further limit the access of technology by developing country enterprises. A number of local enterprises in developing countries will come under pressure to close down or form alliances with larger firms, resulting in a concentration of the industry and dependence on imports may go up. Drug prices are likely to go up upon introduction of product patents with substantial welfare losses to developing countries. TRIPs will lead to a substantial increase in flow of royalties and license fees from developing countries to developed countries. It is by no means clear that strengthening of IPRs will increase inventive activity even in the developed world especially for solving the problems and diseases faced by developing countries. A strengthened IPP regime may actually slow down the pace of technological development by stifling the flow of R&D spillovers that are important inputs in research.

Issues for National and International Action to Moderate the Adverse Effect :

Among the policy responses that developing country governments can take at the national level include exploiting the policy spaces available in the TRIPs Agreement fully. These include: incorporating the provisions of compulsory licensing in the IPR legislation, incorporating the research exception, early working exception or 'Bolar' provision, allowing parallel imports or grey-market imports, incorporating breeders exceptions and farmers exceptions in sui generis plant variety protection. In addition effective competition policy could help in dealing with possible abuse of monopoly power by patent owners. Price controls could also be useful for keeping prices of essential drugs under check. The experience of several East Asian countries suggests that petty patents and industrial design patents could be effective means of encouraging domestic enterprises to undertake minor adaptive innovations and foster a innovation based rivalry among them. Finally, developing countries should resist the attempts of developed countries to evolve TRIPs plus patent regime and ever-greening of patents.

Among the areas for international action include: building a consensus on the moratorium on further strengthening of IPR regime, granting flexibility to low income developing countries below a certain level of per capita income in implementing the provisions of TRIPs, incorporating specific provisions for transfer of technology, and adopting differential pricing strategies for developed and developing countries. Finally, one of the ways of compensating the low income countries for the adverse effects of strengthened IPR regime is to provide increased technical assistance and international R&D funding to local enterprises to help them build local capabilities. One possibility in this respect could be that developed countries donate (a substantial proportion of) technology license fees collected from low income countries to a fund created in the respective countries to assist inventive activities of domestic enterprises. Furthermore, the additional funding for research on tropical diseases

 ISBN: 978-81-910118-7-6

recommended by CMH, for instance, could be made available exclusively to eligible and competent institutions and companies of low income countries to help moderate some of the adverse effects on the inventive activity in these countries.

Japan: Japan is known to have greatly benefited from intellectual property generated in other developed countries in the early stages its development. in Japan the patent protection has been designed with an ultimate objective of contributing to the industrial development and not as an end by itself and contains several features that have helped the absorption of spillovers of foreign inventive activity by domestic enterprises. For instance, food, beverage, pharmaceutical products and chemical compounds were excluded from the scope of patent protection until 1975 to facilitate the process innovations. Japanese IPR system provides for utility models to encourage minor adaptations or improvements over the imported machinery or equipment by domestic inventors, and protection of industrial designs that only needed to demonstrate novelty and not inventiveness. The utility models and industrial designs have allowed Japanese firms to receive protection on technologies that were 'only slightly modified from the original invention'. JPS also employs the first-to-file principle rather than the first-to-invent principle incorporated in the US law, pre-grant disclosure, compulsory license, and (until 1988) narrow claims. All these features have been designed to favour adaptations by domestic enterprises. Almost all of the utility models and industrial design have been granted to nationals. Quantitative studies have confirmed that the weaker patent system employed by Japan has facilitated absorption, transfer and diffusion of technology and contributed to the TFP growth during the period 1960-93. The scope of patent system was expanded to cover chemical and pharmaceutical products only in 1975 to provide protection to technological capability that had developed adequately by then.

South Korea: South Korea adopted the patent legislation only in 1961. However, the scope of patenting did not cover patenting of products and processes to manufacture food products, chemical substances and pharmaceuticals. The US pressure pushed Korea to strengthen its IPR regime in 1986, and extend product patent protection to new chemical and pharmaceutical products, adopt a comprehensive copyright law, and extend the patent term from 12 to 15 years. Korea has also followed an IPR regime that facilitated adaptations and imitative duplication of foreign technologies by domestic enterprises through utility models and industrial designs. That the soft IPR regime adopted initially was a part of conscious policy of the government to facilitate imitation by domestic enterprises has been documented well in the literature on Korean technological capability.

Taiwan: Taiwan has also employed a weak IPR policy to facilitate local absorption of foreign knowledge through reverse engineering on the lines of Japan and South Korea. In fact Taiwan's government seemed to openly encourage counterfeiting as strategy to develop local industries until

1980s. Taiwan allowed patents on food, beverages, micro-organisms, and new uses for products, only in 1994 under heavy US pressure. Like Japan and Korea, Taiwan also provides for utility models and design patents.

India: India had inherited The Patents and Designs Act 1911 from the colonial times that provided for protection of all inventions and a patent term of 16 years. However, a few domestic chemical and pharmaceutical enterprises that tried to develop their own technology in the 1960s were prevented to work their technologies by foreign patent owners using broad and vague provisions of the Patent Act. Under pressure from domestic industry, government adopted a new Patents Act in 1970 that reduced the scope of patentability in food, chemicals and pharmaceuticals to only processes and not products. The term of process patents was reduced to 7 years in food, drugs and chemicals and to 14 years for other products. The compulsory licenses could be issued after three years. It is by now widely recognized that the 1970 Act has facilitated the development of local technological capability in chemicals and pharmaceutical industry by enabling the process development activity of domestic firms as confirmed by a number of quantitative studies. The gradual build up of technological capability of Indian enterprises is visible from a rising trend of residents in patent ownership in India, and in terms of the ability of India to raise her share in the US patents. India ranked seventh amongst all developing countries in terms of US patents obtained (ahead of Brazil, China and Mexico) and fourth in the chemicals sector and in biotechnology (in 1998).

In particular, the rapid evolution of Indian pharmaceutical industry since the mid-1970s highlights the fact that weak IPRs regime could be instrumental in building local capabilities even in a poor country such as India. In 1970 much of the country's pharmaceutical consumption was met by imports and the bulk of domestic production of formulations was dominated by MNE subsidiaries. By 1991, domestic firms accounted for 70 per cent of the bulk drugs production and 80 per cent of formulations produced in the country. With their cost effective process innovations, Indian companies have emerged as competitive suppliers in the world of a large number of generic drugs. A steady growth of India's exports of drugs and pharmaceuticals has transformed the industry from being one being highly import dependent to one that generates increasing export surplus for the country. The share of pharmaceuticals in national exports has increased from 0.55 per cent in 1970-71 to over 4 per cent by the 1999/00. India's share in world exports of pharmaceuticals has risen by 2.5 times over the 1970 to 1998 period making her the second largest exporter of pharmaceuticals after China among developing countries. Inter-firm comparisons show that domestic enterprises are more dynamic in terms of growth of investment and output, export-orientation, R&D activity, technology purchases and labour productivity compared to MNE subsidiaries. The development of process innovation capability of Indian

 ISBN: 978-81-910118-7-6

enterprises has enabled them to introduce newer medicines within a short time lag of their introduction in the world market. The drug prices in India at a fraction of those prevailing in the developed countries are among the cheapest in the world making them affordable to poor masses. The technological capabilities of Indian companies and institutions have attracted leading MNEs to start R&D joint ventures, commission contract research and set up R&D centres.

Thus the Indian pharmaceutical industry has evolved from one dependent upon imports and some formulation activity in the late sixties to one that is able to introduce some of the most sophisticated products indigenously produced within a relatively short lag and at a fraction of the cost, and export a growing proportion of its produce. It is a remarkable achievement especially because it has been accomplished within two decades of the change of patent regime. The case study of India, besides those of the East Asian countries, further highlights the critical importance of fine-tuning and calibrating the IPR regime to the level of development of the country.

To sum up, the East Asian countries have absorbed substantial amount of technological learning under weak IPR protection regime during the early phases. Their patent regimes facilitated the absorption of innovation and knowledge generated abroad by their indigenous firms. They have also encouraged minor adaptations and incremental innovations on the foreign inventions by domestic enterprises and developed a patent culture through utility models and design patents. The other case that is viz. that of India, although following a weak patent regime since 1970, is different in one crucial respect from the East Asian countries in that it did not provide an encouragement to adaptive and minor inventive activity of domestic enterprises with utility models and design patents. In the chemicals and pharmaceuticals it did not prove a constraint as the process patents in the absence of product patents essentially served the purpose of encouraging process adaptive activity of domestic firms. As a result, the domestic chemicals and pharmaceutical industries have developed in their capabilities considerably over the past three decades. However, in the engineering industries and others, there was not a mechanism for encouraging minor adaptations of domestic firms. This difference could perhaps explain not so encouraging performance of Indian enterprises in other industries. Furthermore, IPR regime is only one of the determinants of the technological capability building. The domestic technological effort in absorbing the foreign technologies and innovations in East Asian countries has been vastly more substantive and has been sustained over a much longer period compared to India that attempted to build capabilities with softer patent regime only since the mid-1970s.

Conclusion:

The results of the econometric exercise indicate that research capital and foreign technological spillovers are important determinants of patenting activity. Over the past decade the Indian economy and

many Asian economies have undergone a transformation from an agrarian economy to a knowledge-based economy where IP assets have grown in importance and value, rapidly outpacing physical assets. Thus, to keep up with developments in commerce and trade, it is important for the industry, government agencies and the judiciary to work together closely and continue to develop tools to safeguard IP rights and to enable India to improve and expand its own pro-IP regime

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ISBN: 978-81-910118-7-6

A Critical Analysis of Various Services Provided by Health Insurance TPAs Operating in Pune

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Abstract:

TPA stands for Third Party Administrator. TPA is an intermediary between Insurer and the Customer. TPA's were introduced by the Insurance Regulatory and Development Authority of India (IRDA) in the year 2001. It defines TPA as a "Third Party Administrator who, for the time being, is licensed by the Authority, and is engaged, for a fee or remuneration, in the agreement with an insurance company, for the provision of health services."

A TPA renders variety of services like networking with hospitals, arranging for hospitalization Cashless Services, claim processing and settlement. With advent of so many TPAs in the market it became very difficult for Insurance companies to choose between them so that they can offload their Claim related work.

There is specific work allotted to TPAs by the Insurance companies but the TPAs are expected to add upon brand equity of the Insurance company by providing add on services, managing customer effectively, reducing losses in terms of fake claims and ensuring there are no cases of adverse selection during underwriting of the Policies.

There are around 28 TPAs operating in India as of now. Around 15 companies have offices in Pune. These companies available in Pune are been studied.

The research paper critically analysis the various services and add on provided by the TPAs operating in Pune city. The paper also does a critical evaluation of TPAs and its historical background using literature available in public domain.

Key Words: *Third Party administrators (TPA), Cashless Service, Adverse selection, Underwriting, Claims.*

Literature Review:

Gil Bashe, Nancy J. Hicks (2010) studies the Branding of Health Services and explores how to create, protect and enhance brands in the health service industry. It also gives defines the evolution of marketing differences between product and services branding. Through cases he has studied creating a brand from a new identity, protecting and enhancing a power brand, branding product lines, international brand extension.

Green Micheal (2010), in "Understanding Health Insurance: A Guide to Billing and Reimbursement", gives detail about Health Insurance in India. It talks about various healthcare policies available with Insurance companies. The Striking thing is on what precaution should be taken by the customers before purchasing the Helathcare

 ISBN: 978-81-910118-7-6

Policy. It also gives detailed guidelines on how billing is done and in what format bills are to be procured for reimbursement.

Torinus John(2010), "The Company That Solved Health Care: How Serigraph Dramatically Reduced Skyrocketing Costs While Providing Better", takes a case study and suggests how the cost of healthcare can be reduced.The company gives employee the stake in the Financial outcome of their Healthcare, it drastically reduced the cost. There are chapter which suggests ways by which the Insurance companies can reduce the cost of premium by customizing the product.

Dr.Agarwal Rakesh(2012), " Health Insurance in India- A review", has covered Important topics like Health Insurance Principles and Practice, Critical analysis and review of health insurance business in India, Analysis of year 2009 data in detail for health insurance industry in India Coverage of various reports on health insurance issued by IRDA, CII, FICCI, KPMG, PWC .Details of all products relating to health insurance in India of all general insurance, health insurance and life insurance companies.(PSU & Private)Landmark judgments / Grievance Redressal procedure International scenario in health insurance .

Verma Ruchita, Bawa Sumninder(2011), " Third Party Administrator, An Insight into role defined and role played with reference to IRDA",

In this paper an attempt was made to examine all those conditions, code of conduct/role which is defined IRDA and role in practice played by TPAs, so as to come out with conclusive finding in relation to parameters where parity and deviation exist between role defined and role played. The paper also goes in detail where the TPAs have failed to deliver in what exactly they are supposed to do.

Somen Saha, Bhatt Ramesh(2005), "TPA and Health insurance: Perception of Policy Holder", in his paper he gives lot of information on Low awareness of existence of TPA among Policy Holder, Little knowledge of empaneled Hospitals,TPA insistence on standardisation of fee structure among Providers, Health Providers experience delay in settling claims and No substantial increase in turnover of Patient after empanelment of TPA.

Johry Govind(2010), "Customer satisfaction in general Insurance Industry- A step towards competitiveness", .The paper speaks about Customer satisfaction and does detailed analysis on how customer satisfaction can be measured. It also talks about how one can become competitive in Insurance Industry. Various marketing techniques are discussed.

Lomas Peter(2009)," Third Party Administration in the provision of In-Patient Health Insurance", The paper talks about the reach of Health insurance in India, branding by TPAs and role of TPA in doing so. As per the the author eventhough the reach is good in cities but very poor in rural India. Only 20% of total Insurable population is insured and the percentage is in single digit app 5% in Rural area.

Gupta, I., Roy, A. and Trivedi M. (2004) "Third Party Administrators Theory and

Practice" . In this paper the author speaks on philosophy of TPA and why it was brought as a support to Insurance Companies. It gives good input on various issues faced by insurer and customers before TPA was brought as mediator. It also gives information on performance of TPA outside India and probably that was one of the reason why Indian Govt thought of having it in India as well.

Jaswal, M.(2010), "Understanding the TPAs" Journal of Insurance Regulatory and Development Authority, Here the paper gives insight of various TPA's and its philosophy. It also talks about how TPAs can help Insurance companies to reach to end user. The paper talks about various facilities provide by TPAs to end users. It also talks extensively on Cashless Facility provide by TPAs and various issues and problems faced by customers.

Kalyani K.N(2004) "Paying the Bill! – The great Indian Health Insurance Puzzle and its Solution" the paper talks about pricing policy of Helath insurance products. Here the actuarial process is discussed and how the costing of a product is done .The paper gives idea about the Policy's reach and how it affects costing part.

Dutta Sanjay, " Evolution of health Insurance in India provides information on how Health Insurance evolved in India. It also gives detail information on the issues faced by the clients. Also the CSR initiative is also discussed whole lot of Insurer opposed the Health insurance. The paper also suggested the view of Insurer on its profitability. The paper takes you systematically every event on how finally the Health Insurance came into existence.

Rabin, Yitzjack(2010), "Need for variety of Product in Health insurance", talks about various options in the Health Insurance Products. It has given various examples how TPA has designed customized product for customers in USA. The various underwriting role taken by TPA is western country. It tals about importance of TPAs as they are directly connected with the customers. The paper gives emphasis on the role of TPAs to give right input to Insurer to design necessary product.

Gupta Alok(2003), "The Healthcare Continuum", IRDA Journal Jan 2003, talks about variations which can be brought into the Healthcare business using help of TPA. There are various factors why people don't go for Health Care Insurance. The paper emphasis, how TPA as third party can help Clients to opt for a Helath insurance Policy. It also gives guidelines how Insurer and TPAs can educate people on importance of Mediclaim.

Anderson Michael, Dobkin Carlos (2010), "The effect of Health Insurance coverage on use of medical services, The National Bureau of Economic Research, In this paper, he finds out a sharp change in insurance coverage rates that results from young adults "aging out" of their parents'.

The paper finds out that not having insurance coverage on the utilization of emergency department (ED) and inpatient leads to a 40 percent reduction in ED visits and a 61 percent reduction in inpatient hospital admissions. The drop in ED visits and inpatient admissions is due entirely to

 ISBN: 978-81-910118-7-6

reductions in the care provided by privately owned hospitals, with particularly large reductions at for profit hospitals. The results imply that expanding health insurance coverage would result in a substantial increase in care provided to currently uninsured individuals.

Barbis, Dina(2008) " Brand Model Creation for small Health care service", Journal of Medicine, investigates about various Brand model available in Helathcare Industry. It also proposes a different brand model for a Helthcare company. The paper also gives its views on branding small industry and also the healthcare industry. The paper also suggests how brand message can be passed on in small Industries.

Kolstad Jonathan T(2012), "The Impact of Health Care Reform on Hospital and Preventive Care: Evidence from Massachusetts" . explains the impact of legislation passed In April 2006, at Massachusetts which aimed at achieving near-universal health insurance coverage. The impact was that, among hospital discharges in Massachusetts, uninsurance decreased by 36% relative to its initial level and to other states. Reform affected utilization by decreasing length of stay and the number of inpatient admissions originating from the emergency room. In my opinion educating Customers for proper usage of insurance helps Insurance Companies as well as the customers.

Kolstad, Jonathan(2010), "Adverse selection and an Individual Mandate: when theory meets Practice", The paper emphasis on underwriting. It explains what is Adverse selection and how it can affect the company adversely. It gives importance and suggest methodology for proper underwriting. It also suggest medical underwriting norms to be strict to ensure profitable business.

Mahal, A(2002) talks abou assessing Private Health Insurance in India Potential Impacts and Regulatory Issues. Mahopatra(2005) speaks about Healthy Ground For TPAs in India.

Parekh, N. R.(2003) and Sen Ashok(2008) talks much about TPA Training and developing sustainable Health Insurance in India.

Jeda Ashok(2011), talks about how Health Insurance can become revenues generating Option. It has been opined by most of the Govt owned Insurer that Health Insurer can never become the principle revenue generating instrument. The article suggests various ways by which it can be converted into profitable venture.

Ruchismita, R., Ahmed, I. and Rai, S. (2007) "Delivering Micro Health Insurance through the National Rural Health Mission" gives detailed impetus on the importance of microinsurance and how it can be delivered to Rural India.

Gehlot Suresh(2008)," Health Savings account", explains in detail about cost of Health insurance and how cheap Insurance can be provided to needy and poor people.

Mangat Ram(2008), " Health insurance Underwriting", The article is on various types of products and on pricing part of Health Care product.

Conclusions & Scope for further research:

The proper branding and promotion is required for creating the awareness of health care policies amongst the prospective customers. The above literature suggests that despite of presence of enough Third Party Administrators in the market customers should take precautions before purchase of Health care policy and they should have complete knowledge on the process of bill reimbursement. Since sometimes the costs of Healthcare policies are high so companies play important role in this direction by providing to their employees which reduces the cost drastically.

In spite of the benefits of TPA's to customer, they are less popular because of low awareness, hence proper promotional strategies should be adopted, hospitals can play significant role in this matter. The larger concern is for rural areas because rural areas are out of reach of such promotions. As it is evident from the literature only 5% of 20% insured people are from rural area. The population of rural areas should be taught about the cashless facility of TPA and the various facilities provided by them. They should be informed how TPA helps in designing the customized product as per the requirement of the customer. The IRDA suggests to provide training to reduce costs of insurance so that it should be provided to needy and poor people. Training should also be provided to find out the different pricing strategies of the products.

ISBN: 978-81-910118-7-6

Corparate Social Responsibility (CSR) in Emerging Markets

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Abstract:

CSR has become an integral part of corporate strategy. Companies have CSR teams that devise specific policies, strategies and goals for their CSR programs and set aside budgets to support them.

CSR has come a long way in India. From responsive activities to sustainable initiatives, corporate have clearly exhibited their ability to make a significant difference in the society and improve the overall quality of life. Everyone sees CSR as part of a continuing process of building long-term value. Everything a company does, helps improve the reputation of company and encourage customers and other stakeholders to stay involved with it.

This dissertation tries to identify the after effects e-Choupal and how this initiative has helped the company in its progress. CSR initiatives of some companies have also been discussed. There may be some scope for improvement but serious efforts have been put into to get the best results.

Key Words: *corporate social responsibility, ITC, e - Choupal.*

Data Sources:

The data is purely secondary in nature and the knowledge has been obtained only through various articles available on various websites.

There is no scope to collect primary data in any form as the topic is theoretical in nature and does not include any kind of questionnaire to be filled.

Research Objectives:

The objective of this dissertation is

- To study the Corporate Social Responsibility (CSR) practices in different industries in India.

Research Methodology:

The research commences by searching for the articles related to the topic CSR (Corporate Social Responsibility).Then having a detailed knowledge of the same. Then, studying the steps taken and efforts made in this field by various Indian companies. Taking some examples of Indian companies and explaining the efforts made by listing their contributions. After identifying them, there is study of the results it had on the business and what positive results came out.

Then explaining by examples of various study that how it has lead to increase in profits and is one the reason of corporate success. Also there is special emphasis on an Indian company which can explain the topic better and help to achieve the objectives.

 ISBN: 978-81-910118-7-6

Literature Review:

1. George Pohle and Jeff Hittner in their study on "ATTAINING SUSTAINABLE GROWTH THROUGH CORPORATE SOCIAL RESPONSIBILITY" have highlighted that CEO's have been long accountable to a varied group of stakeholders employees and communities as well as investors. The nature of these relationships is now changing in ways that significantly affect corporate performance in part due to the emergence of the internet and continuing globalization companies are becoming accountable for labor issues and working conditions in their partners as well as their own.
2. Paul Hohnen in their paper on "CORPORATE SOCIAL RESPONSIBILITY: Animplementation guide for business" have said that there is no — one – size-fits – all — method for pursuing a corporate social responsibility (CSR) approach. Each firm has unique characteristics that will affect how it views its operational context and its defining social responsibilities. Each will vary in its awareness of CSR issues and how much it has already done towards implementing a CSR approach.

   There are six steps to implement CSR-

   1. Conduct a CSR assessment
   2. Develop a CSR strategy
   3. Develop CSR commitments
   4. Implement CSR commitments
   5. Report and verify progress
   6. Evaluate and improve
3. R. Edward Freeman, S. Ramakrishna Velamuri, Brian Moriarty in their study on "COMPANY STAKEHOLDER RESPONSIBILITY-A new approach to CSR" have pointed out the fact that if a company is enriching the lives of its stakeholders, then asking the additional question of whether or not it is — socially responsible simply makes no sense-it is meaningless question. If the company is doing everything to keep stakeholders happy, then it deserves to be applauded and offered as an example for other firms to emulate. If it is not doing it satisfactorily as particular stakeholders think it ought, the n these stakeholders could perhaps offer to help it do them better, rather than appeal to actions and responsibilities that lie outside its day to day activities.

Company stakeholder responsibility could be assigning a different meaning to CSR."Company" signals that all forms of value creation and trade –all businesses-need to be involved. Stakeholder suggests that the main goal of CSR is to create value for key stakeholders. And responsibility implies that we cannot separate what we do in the workplace from ethics.

Corparate Social Responsibility (CSR) in ITC:

Introduction:

Agriculture is the backbone of Indian economy producing 23 percent of GDP, and employs 66 percent of workforce. Because of the green revolution, India's

agricultural productivity has improves to the point that it is both self-sufficient and a net exporter of a variety of food grains, yet most Indian farmers have remained poor. The causes include remnants of scarcityera regulation and an agricultural system based on small, inefficient land holdings. The other constraints are weak infrastructure, numerous intermediaries, excessive dependence on the monsoon variation between different agro-climate zones, and many others. The unfortunate result is inconsistent quality and uncompetitive prices, making it difficult for the farmers to sell his produce in the world market. ITC's trail-blazing answer to these problem is the - e- Choupal initiative; the single largest information technology-based intervention by a corporate entity in rural India that is transforming the Indian farmer into progressive knowledge-seeking citizens. Enriching the knowledge of farmers & elevating them to a new order of empowerment. ITC aims to confer the power of expert knowledge on even the smallest individual farmer enhancing its competitiveness in the global market.

E-Choupal:

E-Choupal is a Hindi word which means – Village meeting place. E-Choupal is a virtual market place where farmers can transact directly with a processor and can realize better price for their produce. E-Choupal makes use of the; physical transmission capabilities of current intermediaries & aggregation, logistics, counter-party risk and bridge financing. In June 2000, ITC Limited launched e-Choupal in India and now e-Choupal has become the largest Internet based intervention in rural India. e-Choupal aims to provide farmers ready access to crop specific real-time information to improve the farmer's decision making ability thereby helping them to better align their farm output to the projected demand in Indian market. E-Choupal, the Web-based initiative of ITC's IBD, offers the farmer all information about products and services they need to enhance farm productivity improve farm-gate price realization and cut transaction costs. Farmers can access the latest local and global information on weather, scientific farming practices and market prices at the village itself through the web portal in Indian languages – Hindi, Marathi, Kannada and Telegu. E Choupal also facilitates the supply of high quality farm inputs as well as purchases of produce at the farmer's doorstep.

The Traditional Model:

Indian farmers rely on Department of Agriculture, govt. universities, insurance companies etc. for various inputs such as weather, modern and scientific farming practices and insurance cover. Farmers approach input retailers who source them from wholesalers who are in direct contact with manufacturers. After harvest, farmers bring these produce to mandis; in small multiple lots throughout the year, where beans are auctioned to the traders and agents of the processing companies in an open outcry method. The government facilitate fair price discovery and enable aggregation of goods, regulate these market yards. Successful bidders then bed the beans, weigh them, pay part cash to the farmers, and transport the cargo to the processing

 ISBN: 978-81-910118-7-6

units. But with every intermediary the cost of produce increases to the processor as intermediary adds his profit margin to the cost although the farmers get the lowest price and margin in the whole chain.

E-Choupal and the traditional model:

The main attraction of e-Choupal is that it connects large and small producer and users and eliminates the need of middlemen (who are essential in traditional market). e-Choupal is a virtual market that brings together vendors and customers. Geographical distance no longer restricts participation of farmers. The main hurdle of traditional market is that information asymmetry is inherent in the market where as e-Choupal provides for transparent transaction. The transaction time at the ITC hub is less than at the mandi i.e. 2 or 3 hours where as 1-2 days in mandi.Some more points are:-

- Customer centric and not dependent on intermediaries.
- Capable of being used for many commodities & multiple transactions.
- Easily scalable once it is verified.
- Uses local talent and local people to develop local leaders.
- Uses all the existing institutions and legal frameworks.
- Scientific way of inspection, testing and weighing.

The e-Choupal business model

The model is centered on a network of e-Choupal, information centers equipped with computer connected to the Internet, locating in rural farming villages. e-Choupal serves as Choupal (gathering place) and an e-commerce hub. A local farmer acting as a Sanchalak (coordinator) runs the e-Choupal and the computer usually is located in the sanchalak‘s home. ITC also incorporated a local commission agent known as the Samyojak (collaborator), into the system as the provider of logistical support.

The critical element of the e-Choupal system and the key to managing the geographical and cultural breath of ITC‘s network by recruiting a local farmer is the sanchalak. Sanchalak create trust in society and all infrastructure set up is made in his house. Sanchalak receives commission for every transaction processed through the e-Choupal and also benefited from increased social status that accompanies the position – a significant advantage in rural Indian life. Sanchalak act as public officer in ITC project. Sanchalak also aggregates farmers input as well as purchase orders. Sanchalak undergoes training of basic computer usage, basic business skills, quality inspection of crop product training etc. The samyojak or cooperating commission agents also play important role. He earn income by providing logistical services that substitute for the lack of rural infrastructure by providing information and market signals on trading transaction. Samyojak is involved in ongoing operation of e-Choupal system, allowing them revenue streams through providing services such as management of cash, bagging& labor at procurement hubs, handling of mandi paperwork as licensed principals for the retail transaction of the e-Choupal.

Comaparison of e-Choupal and Conventional System

Conventional system vs. e-Choupal

Cost Conventional market e-Choupal

Trolly freight 100 Nil

Filling and weighing 70 Nil

Labor khadikarai 50 Nil

Handling loss 50 Nil

Subtotal 270 Nil

Commission agent 100 50

Cost of bag 75 Nil

Labor (stitching and loading) 35 Nil

Labor at factory (unloading) 35 35

Freight to factory 250 100

Transit losses 10 Nil

Subtotal 505 185

Grand total 775 185

As percent of produce value 8 percent 2 percent

The e-Choupal System:

The previous day‘s mandi closing price is used to determine the benchmark Fair Average Quality (FAQ) price at the e-Choupal, which is static for a given day. The information of mandi price is communicated through e-Choupal portal. If and when connection fails, sanchalak calls an ITC field representative. To initiate a sale the farmer brings a sample of his produce to the e-Choupal. The sanchalak performs the quality test in the farmer‘s presence & must justify any deduction to the farmer. These simple checks and balances ensure transparency in a process where quality testing and pricing happens at multiple levels. If the farmer chooses to sell his produce to ITC, the sanchalak gives him a note capturing his name, his village, quality test report, approx. quantity and conditional price. The farmer takes the note from sanchalak and proceeds with his crop to the nearest ITC procurement hub. Some procurement hubs are simply ITC‘s factories that also act as collection points.

ITC‘s goal is to have a processing centre with a 30 to 40 kms radius of each farmer. At the

ITC hub, a sample of the farmer‘s produce is taken and set aside for laboratory test. Laboratory testing of the sample for oil content is performed after the sale & does not alter the price. The reason for this is that farmers having historically being exploited are not immediately willing to trust a laboratory test. After such inspection, the farmer‘s cart is weighed on an electronic weighbridge, first with the produce and then without produce. The difference is used to determine the weights of his produce. After weighing, the farmer collects his payment in full at the payment counter. The farmer is also reimbursed for transporting his crop to the procurement hub.

Every stage of the process is accompanied by appropriate documentation. The farmer is given copy of lab reports, agreed rates and receipts for his record. Sanyojaks, who are adept at handling large amount of cash, are entrusted with the responsibility of payment except at procurement centers. Samyojaks also handle much of the hub logistics, including

 ISBN: 978-81-910118-7-6

labor management at hub, bagging, storage mgmt., transportation from hub to factors and handling mandi paperwork for the crops procured at the hub and for all this he is paid a 0.5 percent commission.

Benefits of e-Choupal:

A quiet digital revolution is reshaping the lives of farmers in remote Indian villages. e-Choupal delivers real-time information and customized knowledge to farmer's decision making ability, securing better quality & price. The e-Choupal initiative also creates a direct marketing channel, eliminating wasteful intermediation and multiple handling, thus reducing transaction cost and making logistics efficient.

1. Digital transformation - ITC began e-Choupal with Soya grower in the villages of M.P. e-Choupal tried to change the stereotype image of farmers of bullock cart. Farmers now log on to the site through internet kiosks to order high quality input, get information on best farming practices, prevailing market prices for their crops at home and abroad for the weather forecast all in the local language. The e-Choupal site is also helping the farmers discover the best price of their quality at the village itself.

   The site also provides farmers with specialized knowledge for customizing their produce to the right consumer segments. The new storage and handling system preserves the identity of different varieties right through the farm gate to dinner plate' supply chain. Thus, encouraging the farmers to raise their quality standards and attract higher price.

2. Credit and Insurance - Farmers' low income and difficulty in accessing credit limits the capacity to pursue opportunities within and outside the agriculture sector. ITC e-Choupal proposes the solution of this problem by making partnership with financial institutions. e-Choupal provide various types of loans like non-cash loans for farm inputs, loans to sanchalak (sanchalak can better manage credit risk & have better access to farmers), direct loans to farmers based on sanchalak recommendation, Insurance & risk management services etc.

3. Leadership development - ITC uses involvement of farmers in content creation helps to easily customize the information as per the local requirements. Participation of local farmers ensures provision of adequate and decipherable information to e-Choupal, which can be employed into the farming, or pricing of the produce. The increased participation in e-Choupal develops local leadership quality in farmers. The farmers get attracted towards e-Choupal due to increased profits, added services that he could get, saving in time and the ability to use e-Choupal for many transactions.

   E-Choupal delivers relevant technologies in the hands of the farmers, which can improve the economic condition of the entire village. E-Choupal is one of the very few

ICT projects in India that has effectively utilized e-commerce transactions for poverty alleviation. ICT also reduced the number of middlemen between producers and consumers. Now, simple technology solutions are available to create networks in rural areas, which can function as virtual marketplaces.

e-Choupal at a glance

States covered 9 States [M.P., Haryana, Uttaranchal, Karnataka, A.P., U.P., Maharashtra, Rajasthan and Kerala]

Villages covered 36,000

e-Choupal info kiosks 6,400

Empowered e-farmers 3.5 million

4. Other benefits to farmers are reimbursed for transport to the procurement hub of e-Choupal.
    1. The transaction time at the ITC hub is also much faster than mandi.
    2. ITC has given recognition to integral partner in the supply process & not mere as agricultural producer and thus elevating the level of respect of farmers. Similarly providing shaded seating area while waiting for their paperwork shows ITC really care for farmers.

Cost and Revenue Stream:

e-Choupal has been successful. It has reduced the cost of procurement and the cost of transit and the material handling cost. Procurement transaction costs are reduced from the industry standard of 8 percent (farmers incurs 3 percent and the processor incurs 5 percent) to 2 percent (with farmer saving all his 3 percent, and the processor ITC – saving 3 percent).

The total cost incurred on the initiatives so far has been Rs.50 million (Rs.35 million as capital cost towards computers and other hardware at the kiosks as well as central servers and Rs.15 million revenue expenditure incurred towards portal development, people overhead etc.). But ITC has gain benefit Rs. 20 million, which is the equivalent of full investment on 40 percent of the Choupals (Kiosks). In terms of future revenue, the outflow is 52.1 million in 2001-02 which reduces to 3.90 million in 2005-2006 and for 2006-07 is estimated as 2.70 million. Where as inflow in 2001-02 is 15.3 million where as 65.0 million in 2005-2006 and estimated as 85.0 million in 2006-2007. The internal rate of return (IRR) on the project works out to be 21.55 percent.

In the mandi system, there was a mark up of 7-8 percent on the price of soybean from the farm gate to the factory gate of this mark-up 2.5 percent was born by the farmer while 5 percent was borne by ITC with e-Choupal, ITC cost are down to 2.5 percent. In absolute terms, both the farmers and ITC save about $ 6 per metric ton.

Weakness of e-Choupal:

Although e-choupal helps eliminate the middleman and therefore allows farmers to get a better price for what they grow, it does nothing to solve the more fundamental problem of the inherent inefficiencies created by so many tiny farms.

In addition, it relies on infrastructure, which is often lacking in rural communities. Electricity and telecommunication services

 ISBN: 978-81-910118-7-6

can sometimes be less than 100 percent reliable in some of the places where e-Choupal has been implemented. Finally, although there is no longer a middleman, e-Choupal can be no more effective than the sanchalak (coordinator) in each community.

Challenges:

As the power is usually available for only a few hours a day at on a sporadic schedule, the e-

Choupal computer cannot always be accessed when information is needed. Phase imbalances leads to damage of equipments. Telecommunication infrastructure in villages is poor. Telephone exchange also have limited battery backup. In addition, there is no local support staff to maintain or troubleshoot telephone exchanges. The support team is also short-staffed.

Other challenges are: -

1. Illiteracy about computer in rural areas as well as rural population has low trust on electronic system.
2. Selection of an educated, intelligent, reliable and matured person as a sanchalak.
3. Improper knowledge about rural market.
4. Vicious circle of intermediaries (Adatiya& Brokers).
5. Improper and complex user interface on e-Choupal.
6. Lack of rules and regulation related to electronic Choupal.
7. Mistrust about inspection, testing and weighing of produce on centers.

ITC‘s example show the key role of IT in providing and maintaining by a corporation, but used by local farmers – to bring transparency, to increase access to information, and to catalyze rural transformation, while enabling efficiencies and low cost distribution that make the system profitable and sustainable . Critical factors in the apparent success of the venture are ITC‘s extensive knowledge of agriculture, the effort ITC has made to retain many aspects to the existing production system, including retaining the integral importance of local partners. ITC e-Choupal is committed to transparency and respect and fairness towards farmers as well as local partners.

There are several issues which the company has addressed. Firstly, it is not just tweaking around but a greater efficiency in the supply chain. One of the problems in redesigning supply chains is how to use different tools, thus making the various players still own the chain. Here, the farmer and the team are involved in painting the big picture, so there is enthusiasm and a feeling of ownership.

Further, how do you avoid a channel conflict by finding space for the middle-men? Upton also points out that the ‘roll out, fix it, scale up’ model is a new approach to strategic management. The philosophy here is that the terrain has so many uncertainties that gaps willexist. So, unlike in the past, where focus was on well-laid strategic plans, here you giveexperimentation-based strategies more weightage.

The e-Choupal Advantage:

ITC's e-Choupal project is a winner—for farmers who get better remuneration and for the company that's assured quality inputs for its business

1. **IT for the Masses :** The e-Choupal project covers over 35,000 villages in Madhya Pradesh, Uttar Pradesh, Maharashtra, Karnataka, Andhra Pradesh, Rajasthan, Haryana and Uttaranchal providing millions of farmers with critical information on farming. The Choupal services are being delivered by over 6,000 Sanchalaks and over 17,000 UpaSanchalaks to these remotest areas.
2. **Multiple Benefits :** Farmers can look at weather forecasts, order fertilizer and herbicide, and consult an agronomist by e-mail when their crops turn yellow. At some e-Choupals they can even buy life insurance, apply for loans and also check their children's exam results. While much has been written about the social benefits of ITC's e-Choupal, the matter of the fact is that the project was conceptualized with a pure business focus to create farmer communities in villages to facilitate sourcing of high-quality farm produce for the company's fast growing agribusiness.
3. **Better Payment :** In IT parlance, e-Choupal is an intelligent blend of applications like CRM and supply chain management. For instance, by helping the farmer identify and control his inputs and farming practices, and by paying more for better quality, ITC has been able to preserve the source and improve the quality of produce.

   The project was built using .NET. The first implementation of a Soya Choupal took eight months but later extensions like the Aqua Choupal for aquamarine farmers took between six and eight weeks.

   Today e-Choupal is a flexible, easy to deploy solution. ITC Infotech provided an in-house team of 25 to 30 people in the initial stage and this gradually came down to around 20 people, and finally a five-member team to maintain the project.

   The portfolio of commodities sourced has been vastly expanded to include maize, barley, sorghum, and pulses, and the sourcing cycle is extended almost around the year. In the commodities market, these two factors are helping ITC create a definite competitive advantage.

Other CSR initiatives of ITC:

ITC: One of India's most valuable companies continuously strives to be a Citizen First' entity. ITC has always attached critical importance to its responsibility to contribute to preserving and enriching the environment.

ITC's contribution to sustainable development extends beyond Environment, Health and Safety considerations. Through its philosophy of Transforming Lives and Landscapes', ITC is empowering farmers, greening wastelands, irrigating dry lands, creating women entrepreneurs and educating rural children. Through these

 ISBN: 978-81-910118-7-6

initiatives ITC has touched the lives of over 2 million villagers across the country.

Ensuring Occupational Health & Safety

In keeping with ITC's commitment to provide a safe and healthy workplace for its employees, the Company's Occupational Health and Safety norms go beyond the requirements of the Factories Act, 1948 ITC also strives to go further than merely complying with International Labor Organization (ILO) requirements on worker safety and health

Conserving Energy

ITC strives to conserve energy in all its operations by reducing specific energy consumption.

It also endeavors to increase the use of waste material for energy generation.

ITC Units continuously explore the potential for renewable energy. Different ITC Units have undertaken initiatives to use renewable energy sources such as biomass, wind and solar power.

Reducing Greenhouse Gases

As part of ITC's concern for global warming, the Company began efforts to become a carbon-positive corporation.

India is a signatory to the Montreal Protocol of 1987. The Government of India has consequently formulated a policy to phase out various Ozone Depleting Substances (ODS) on a priority basis. All ITC Units have detailed plans in place to conform to this policy.

Restoring the Ecological Balance

ITC has effectively leveraged its need for wood fiber to provide significant livelihood opportunities to economically backward wasteland owners. The Company has undertaken extensive tree plantation, at all its Units, and major afforestation and watershed development programmes across the country. So far some 35million saplings have been planted over 16,000 hectares, generating employment for about160, 000 people.

Apart from the obvious benefits of increasing the forest cover this effort also directly contributes to moisture conservation, groundwater recharge and a significant reduction in topsoil loss due to wind and water erosion.

Leaf-litter continuously enriches depleted soils. This further reduces the consumption of fertilizers and pesticides, thus preventing the chemical pollution of groundwater sources

Conserving Water

ITC has always endeavored to be a water-positive corporation by returning to the environment more water that it uses. ITC's guidelines on water management require that all Units minimize the use of water through conservation and recycling.

Treated effluent is reused or recycled wherever appropriate. ITC strives to restore to the environment as much as possible of the precious water it uses. ITC Units have efficient wastewater treatment plants that treat wastewater to standards of purity that are significantly better than prescribed standards. ITC business units evaluate the potential for rainwater harvesting and implement them wherever feasible. Rainwater harvesting initiatives have been

increasing over the years. The total rainwater harvested across all ITC units was around 250,000 KL in 2002-2003.

Enhancing Eco-Efficiency

The ITC Environment Health and Safety Policy and Codes of Practice require all Units to take EHS issues into consideration in identifying and using resources. The Company continually strives to:

1. Maximize the efficient use of resources
2. Eliminate unnecessary toxic and hazardous resources
3. Give preference to renewable, recycled, recyclable, reused and reusable resources All ITC Units consistently endeavor to reduce generation of waste and maximize its recycling. Wastes are systematically segregated as hazardous, bio-medical, nuclear, nonhazardous, and biodegradable and non-biodegradable, to be appropriately treated, recycled or disposed.

Nearly 44% of solid waste from ITC's paper business is currently recycled while solid waste production has reduced by 12%.

Some Other CSR Initiatives by other Companies Globally:

AARTI DRUGS LTD.

CSR Activities conducted

As Contribution towards community development to fulfill company's obligations towards the society, company organizes many activities on regular basis including Blood donation, Eye Checkups, Health Check up Camps, Career guidance workshops for young students. The company has also donations to hospitals. As a step towards our objective of up gradation of primary education in the surrounding areas, infrastructure, development of school was initiated and supported. Contributions was made to primary schools of surrounding villages for painting of school buildings, purchase of benches & furniture, sports equipments, records storage, facilities etc.

The efforts have been appreciated by employees and community at large. The company has been providing maintenance services to the Palghar –DhanuTaluka Sport association ground located at Boisar.ADL donated Rs 4.27 Lacs for the construction of Shri Mahavir Jain Charitra Kalyan Ratnashram.

Cadbury

Cadbury is a global confectionery and beverage manufacturer having its presence in more than 200 countries worldwide. The company started its operations in India in 1948 and is the leading manufacturer with 70% volume share of the chocolate market. The company is also a key player in malted food drinks and sugar confectionery. The company after becoming a founder member of BCF embarked upon social and community development initiatives and attaches a lot of importance to social development initiatives.

Close to its factory at Malanpur near Gwalior, the company is working on a project targeting women's empowerment and female infanticide. The initiative known as the ' Gurikha Project' was launched in line

 ISBN: 978-81-910118-7-6

with Cadbury India's philosophy to serve communities around its factory locations in partnership with NGOs on a planned and sustainable basis. The projects key focus is on various aspects of women's inequality, female infanticide and rights of the girl child.

As per a recent survey, the project has succeeded in giving a sense of direction and confidence to a large number of women of the area and a marked improvement has been noticed in the general well being of the girl child. Apart from this, the company is also working on issues like primary education, health & veterinary care, women's income generation activities and strengthening of the village council. Under the income generation programme, more than 10 self help groups with monthly savings ranging from 20,000-50,000 rupees are functional in the area. Besides this, Cadbury has also helped build a preschool section to the village school building for girl children and a set of classrooms in another village under the same Panchayat.

Cavinkare

CavinKare takes an active interest in supporting organizations working on social issues. C.K Ranganathan is one of the founder-members of the Ability Foundation – an NGO working towards the rehabilitation of the disabled. His belief took a firm shape when CavinKare teamed up with Ability Foundation, led by Mrs. Jayashree Raveendran, an NGO that is primarily working to integrate persons with disabilities into mainstream society; instituted CavinKare ABILITY Awards to celebrate the exemplary spirit of rare breed of individuals who have risen above their physical limitations to display that attitude is everything. The annual awards which has been organized for 5 years in succession till date has gained enormous recognition. Many celebrities, social workers, civil servants, and people from all walks of life contribute to the cause by witnessing the awards and also contributing in the manner they desire towards the just cause.

The CavinKare ABILITY Awards, a total of three awards, are given annually to salute personal triumphs, the extraordinary spirit of achievement and a looking beyond one's own self and physical limitations. The awards are

- The CavinKare ABILITY Award for Eminence (1Award).
- The CavinKare ABILITY Mastery Awards (2 Awards).

FedEx:

FedEx, which has set itself the objective of being the express carrier of choice, believes that to achieve this end it has to be first seen as an employer and a neighbor of choice. And while it has been voted among the best workplaces in the country, it is keen to prove that it is a conscientious corporate as well.

"As an organization, we aim to be the preferred express carrier. For this, we also have to be preferred neighbors," says Mr. Jacques Creeten, Managing Director, Indian Subcontinent, and FedEx.

According to him, commitment to corporate social responsibility or CSR, at FedEx, goes beyond the annual donation to

a charitable organization.

Employees meet every six months to decide among themselves in what way the company can touch the lives of people in their immediate environment.

A good example of such an engagement is FedEx's tie up with CRY in the field of education, which not only aims at providing basic education to underprivileged children, but also at supporting their overall development. It has donated Rs 15 lakh towards four CRY-supported projects that is expected to impact the lives of 15,000 children.

As part of its involvement in a project called Arambh, the organization has been addressing issues of women and children in the slums of Navi Mumbai.

LG Electronics

LG Electronics has hiked its budget for community development activities from Rs 2.5 crore to Rs three crore. Of this, Rs 1.5 crore will be allocated to LGs 38 branch offices for use in local activities. The remaining Rs 1.5 crore will be spent by the head office in the Greater Noida area. As part of its initiatives in corporate social responsibility, LGE has also launched a new initiative with New-Delhi based NGO Prayas that works for the upliftment of underpriveleged children. Under LG Prayas', LG will contribute a sum of Rs 25 lakh to sponsorPrayas' social activities

In keeping with its plan of supporting organizations committed to social causes, LG will also be tying up with Helpage India, an NGO that looks after the aged. It already has a tie-up with another NGO Jan ShikhanSansthan for generating self-employment opportunities for unemployed in the form of tailoring, knitting etc.

Its community development initiatives include a focused plan for providing health services to underprivileged children, animal healthcare and enhancing professional skills of unemployed youth. It has also adopted 24 villages in the vicinity of its factory in Noida. Prayas, which began as an emergency relief and rehabilitation initiative for destitute children in Delhi in 1988, has expanded its area of operation to include institutional care, alternative education and vocational training to neglected street and working children. It caters to the needs of 50,000 slum kids in Delhi, Gujarat and Bihar, through 65 centers under 13 projects and three shelter homes.

NOKIA

Nokia with its mission to 'connect people' is the world leader in mobile communications. The company is deeply concerned about ethical business practices and believes that personal and organizational integrity is essential to long term relationships- whether with customers, employees or stakeholders. The organization is committed to development initiatives and is supporting numerous projects in partnership with several community and charitable organizations worldwide. The focus of its community initiatives are centered on education, corporate giving and disaster relief.

Keeping in line with their international programme of employee volunteering called 'Helping Hands', Nokia India is involved with an NGO working with children with

 ISBN: 978-81-910118-7-6

disabilities in Delhi. Nokia's employees provide support to the NGO in terms of help and training in accounts, human resources, IT, working with children and other activities. Environment is another issue that is high on the agenda of the company. The packaging of all their phones is made from recycled paper. Clear instructions are also provided for correct disposal of used batteries with every handset.

Philips India

Rural health care

Philips India is committed to the community in which it lives, works and serves. They firmly believe in making a lasting, positive contribution to the people around them. Villages in rural India desperately need preventive health, education and knowledge-based care. To meet these needs, Philips is stepping out as part of its Corporate Social Responsibility, to bring healthcare to those in rural India who need it most.

In association with the Trust for Reaching the Unreached (TRU), Philips introduces Arogya Kiran - a project designed to provide quality healthcare to people in rural India.

SONY

Environmental Conservation Activities

Established Partnership with NGO to Address the Issue of Climate Change In July 2006, Sony signed an agreement with the World Wide Fund for Nature (WWF) global environmental NGO, to join its "Climate Savers Programme". Under the program, Sony has agreed to partner with the WWF to reduce greenhouse gas emissions at Sony's sites around the world, reduce carbon dioxide emissions from product use by lowering the annual energy consumption of major Sony products and cooperate with the WWF to raise consumer awareness of global warming prevention.

Promoting Product Energy Saving

In February 2007, Sony received a Sustainable Energy Europe Award from the European Commission, the first consumer electronics and Entertainment Company to earn this prestigious prize. The award recognized Sony for its voluntary commitment and efforts to improve the energy efficiency of its products, as well as its disclosure of information to consumers. As of February 2007, all Sony televisions sold in Europe had standby power consumption below 1 watt, with 30 models achieving a standby power consumption of only 0.3 watts, below the market average. In Japan, Sony's KDL-40J3000 model BRAVIA LCD television has achieved an energy-conservation level of 180% relative to Japan's energy saving laws, representing the industry's highest energy-saving performance.

Environmental Conservation at Sites

Sony is engaged in a variety of environmental conservation activities at its sites as it works towards its "Green Management 2010" mid-term group environmental targets, to be achieved by 2010. In fiscal 2006, Sony's emissions of greenhouse gases (calculated in terms of CO2) totaled approximately 2.03 million tons, down 9% from fiscal 2000 levels. Furthermore, waste from Sony sites was approximately 193,000 tons, down 30% from

the fiscal 2000 level, while the amount of water used dropped approximately 16% from fiscal 2000 to 24.18 million cubic meters.

TUPPERWARE

Through a programme called Tupperware children's fund, Tupperware establishes charitable Alliances with non-profit organizations offering solution based, life-enhancing programmes and resources that have positive impact on children and families. In India, money from the proceeds of each sale of Tiwi Munch goes towards this noble cause. Another Social Initiative is the Tupperware Charitable Dispensary in Gurgaon, managed by Quota International, an NGO.

Quota International is an International Service Organization working towards serving the underprivileged sections of the society. It is more than 80 years old and has more than 8000 members in 14 countries.

In India, Quota International, among various projects, runs a charitable Dispensary supported by Tupperware India. The dispensary situated in Gurgaon (Haryana) provides medical services and free medicines to underprivileged people living in the nearby areas.

DABUR

Dabur's CSR initiatives are driven through Sustainable Development Society or SUNDESH, an outcome of the vision of Dabur India Ltd founder Dr. S. K Burman.

SUNDESH

Sustainable Development Society (SUNDESH) is sworn to the mission of ensuring overall socio-economic development of the rural & urban poor on a sustainable basis, through different participatory and need-based initiatives. It aims to reach out to the weaker and more vulnerable sections -- such as women and children, illiterate and unemployed – of the society.

Today, SUNDESH operates in Ghaziabad and Gautam Buddha Nagar district of Uttar Pradesh, and has -- more recently – established presence in Rudrapur district of Uttrakhand. Over the years, it has contributed to many worthy causes, addressing children's literacy, improving healthcare services, skill development, and environment, to name a few.

Medicinal Plant Project – An initiative by Dabur Nepal Pvt. Ltd.

Dabur Nepal Pvt. Ltd. is a joint venture company established in the year 1989 when probably very few investors had their roots in Ayurveda. Dabur Nepal has started the project on medicinal plants in Nepal to provide the modern technology for cultivation of the required medicinal herbs of Himalayas to the farmers. The only eco-friendly project of CSR nature in Nepal, this initiative is fully integrated with the company's business vision.

A state-of-the-art Greenhouse facility has been set up at Banepa, which has the capability to produce 5-6 million saplings of medicinal plants per annum. All the required climatic parameters for uniform growth of saplings of the medicinal plants like temperature, humidity etc. are controlled by automatic computer systems. Besides helping preserve natural resources, this initiative has also gone a long way in

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generating employment and income for local people and improving the socio-economic conditions of local populace in the Himalayan Kingdom.

Reasons for the Success or High Profits of ITC

1.competitive Nature

They have been three years into the Indian foods market and ITC Foods are challenging for

Heavy weights like PepsiCo, HLL and Britannia in three different segments simultaneously.

The launch of Bingo snacks was ITC Foods' fifth line of foods business after staples, biscuits, ready-to-eat and confectionery businesses.

They have a good consumer response and this response to the offerings show a better success ratio. They have a clear connect with consumers in an otherwise tough market. To get the fundamentals right, ITC foods segmented consumer needs and identified gaps in the market. Product development answers the gaps thrown up by consumer research.

2. Robust Supply Chain

Their food business plan is backed by a robust supply chain and effective distribution to ensure consistency in supply and quality. And their communication and brand cut through the advertising clutter and define clearly the values associated with the product. Celebrity advertising with Sunfeast biscuits, for instance, helped quick recall in a segment where it competed with old established brands. Success in foods requires a keen understanding of the supply chain for farm produce. A robust distribution network across India is also a big plus.

3. Consistency In Quality

The challenge in the FOOD market is to offer consistency in quality. That's where Aashirvaad scores over competitors who could not offer that quality consistency. The biggest certificate for Aashirvaadatta is that sales picked up substantially purely on word of mouth from satisfied consumers. The consumers are biggest ambassadors and advertisers. The pricing too has been competitive. Consumers'track on conversion levels from traditional atta market (where consumer purchases wheat and grinds it) shows a 35% shift to our packaged brand.

4. High Market Share

ITC holds close to 70 per cent of the domestic market for cigarettes with the segment's contribution to the top line averaging 65 per cent and profits 85 per cent for the four years ended March 2009. With strong pricing power to pass on excise duty hikes, operating margins have averaged a healthy 25 per cent, much higher than rivals such as Godfrey Philips.

ITC may remain the market leader in the cigarette business, growing in high single-digits in terms of volumes. ITC's mindshare' among consumers, is going to be hard to dent by rivals such as Philip Morris and Godfrey Philips. The business is likely to remain the major cash cow, continuing to fund efforts to diversify into other businesses.

5. In House Production

In-house production of cartons filters and paper, coupled with efficient raw tobacco procurement, have made ITC a highly integrated player. In house production helps them to save time and cost. There is no delay and dependability that can hamper the smooth supply of materials.

6. Diversified Portfolio

To diversify its revenues and profits, ITC has charted several forays into consumer products such as garments, confectionery, consumer staples, bakery products, snacks and stationery products.

In the FMCG business, ITC has over the past couple of years moved from segments such as matches, snacks and consumer staples ITC does enjoy a competitive edge in bakery products or consumer staples by virtue of its well established agri-product supply chain such as atta into the more highly competed soaps and personal products.

7. Conribution of e-Choupal

The agribusiness segment, procures rice, soya, coffee, wheat, tobacco, potatoes for trading and internal consumption.

ITC's much-admired e-Choupal, which is part of this segment, essentially provides information to farmers procures directly from them and also doubles up as a mechanism for distribution of FMCG products and other services. For now, operating margin in this segment tends to swing quite sharply with the commodity prices and is likely to remain on the lower single-digit figures.

Foods business needs a strong, quality-oriented and dedicated supply chain. Buying wheat from the open market would mean different quality at different times. That's where we had immense support from ITC's e-Choupal that ensured consistency in wheat quality.

These are some of the reasons of ITCs success or high profits of which one is corporate social responsibility.

Interpretation:

After the completion of dissertation named CORPORATE SOCIAL RESPONSIBILITY IN EMERGING MARKETS' I would like to conclude that in today's competitive era CSR has an important role to play.

CSR initiatives practiced by the companies contribute to the profit and success of the company. As an example in the success of ITC,CSR initiative e- Choupal has an important role to play as it is one of the success factors of ITC.This has been showed with the help of graphs that depict the company's performance since the e-Choupal has been initiated(2000).

With time many other companies have started taking interest in this kind cause.

Recommendations:

1. The companies practicing CSR should provide information about the after effects of their CSR initiative. This would help the stakeholders to understand the initiative better.
2. Companies should focus more on CSR initiatives as it leads to the growing profits for the company.

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Limitations

1. CSR initiatives practiced by companies were easily available but the results of these initiatives are hard to find out.
2. It was difficult to find out the contribution of the CSR practices to the profit of the company after they were initiated.

Refrences

A guide to corporate social responsibility.

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www.karmayog.org

www.itcportal.com

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e-Choupal and Profitable Rural

A Study of India's FDI Policy and its Impact on Industrial Growth from 2000 to 2011

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Abstract:

Significant changes have been made in the Foreign Direct Investment (FDI) policy management in the recent times to ensure that India remains increasingly attractive and investor friendly. For ease of reference, all existing regulations on FDI were integrated into one consolidated document. The document was released as 'circular 1 of 2013', effective from 5th, April 2013. There has been a tremendous growth in the FDI inflows from US $2.19 billion in 2003-04 to US $ 36.5 billion in 2011-12. The UNCTAD World Investment Report 2011, in its analysis of the global trends and sustained growth of FDI inflows, has reported India as the second most attractive location for FDI for 2011-2013.

To encourage FDI inflows, the FDI policy has continued to be fine tuned and liberalized progressively allowing FDI in more industries under automatic route. Starting from 2000, FDI policies in India are increasingly reflecting the requirement of the economy and facilitating its integration with global economy. In the new policy management, all the activities have been put of automatic route on a negative listing basis except those that attract industrial licensing. Technology collaboration has also been brought under automatic route and royalty ceilings have been removed. This paper attempted to make a study of FDI Policy in India and its impact on industrial growth. It also focuses on FDI inflow year-wise and sector wise.

Key Words: *Indian government, FDI policy, Industry, Foreign Investors, Growth.*

Introduction:

Every country needs EPS support i.e. Economical, Political and Social support for the overall development. There are many mediums through which underdeveloped and developing countries can bridge the EPS gaps with the help of rest of the world. Foreign direct investment (FDI) is one of the way by which developed countries are giving helping hand to the underdeveloped and developing countries. FDI flows are usually preferred over other forms of external finance because they are non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. FDI also facilitates international trade and transfer of knowledge, skills and technology. In a world of increased competition and rapid technological change, their complimentary and catalytic role can be very valuable. To encourage FDI inflows, the FDI policy has continued to be fine tuned and liberalized progressively allowing FDI in more industries under automatic route.

FDI policies in India are increasingly reflecting the requirement of the economy and facilitating its integration with global economy. Starting from 2000, in the new

 ISBN: 978-81-910118-7-6

policy management, all the activities have been put of automatic route on a negative listing basis except those that attract industrial licensing. Technology collaboration has also been brought under automatic route and royalty ceilings have been removed. Significant changes have been made in the Foreign Direct Investment (FDI) policy management in the recent times to ensure that India remains increasingly attractive and investor friendly. For ease of reference, all existing regulations on FDI were integrated into one consolidated document. The document was released as 'circular 1 of 2013', effective from 5th, April 2013. There has been a tremendous growth in the FDI inflows from US $2.19 billion in 2003-04 to US $ 36.5 in 2011-12. The UNCTAD World Investment Report 2011, in its analysis of the global trends and sustained growth of FDI inflows, had reported India as the second most attractive location for FDI for 2011-2013. This paper has attempted to make a study of FDI Policy in India and its impact on industrial growth. It also focuses on FDI inflow year-wise and sector wise. The study is based on the time period from 2000-2011.

Objective:

- To study India's FDI Policy.
- To understand the inflow of FDI year-wise and sector wise in India.
- To analyze the impact of FDI Policy on industrial growth of India.

Researh Methodology:

This research is a descriptive study in nature and makes use of secondary data. The data will be collected and compiled from already published sources for the period 2000-2011. The major sources include RBI bulletins, annual reports and handbook of statistics on Indian economy, Department of Industrial Policy and Promotion (DIPP), SIA newsletter, books, websites, journals and the like.

Limitations of the Study:

- At various stages, the basic objective of the study will be suffered due to inadequacy of time series data from related agencies. There will also be a problem of sufficient homogenous data from different sources.
- No proper methods are available to segregate the effect of FDI on Industrial growth.

Literature Review:

This section reviews the empirical studies on the relation between FDI and economic activities in the host economy, which could facilitate in identifying the issues relating to the impact of FDI on the economy.

- FDI may have a positive impact on economic growth leading to an enlarged market size, which in turn attracts further FDI. Some studies in this literature have found that FDI exerts a positive growth effect on the recipient countries (De Mello, 1999; Chong et al., 2010).
- According to Hayami FDI may help the host country to break out of the vicious cycle of underdevelopment (Hayami, 2001).

- The results of the study show that there is a positive relationship between FDI and GNP and it is significant at 5 per cent level for the Chinese economy. It is also supported by other study by Sahoo (2002).
- Samuel Adams (2009) in his paper, "Can Foreign Direct Investment help to promote growth in Africa" provides a review of Foreign Direct Investment and economic growth literature in the context of developing countries and particularly Sub- Saharan Africa. The main findings of the study are as follows, first, FDI contribution to economic development of the host country in two main ways, augmentation of domestic capital and enhancement of efficiency through the transfer of new technology, marketing and managerial skills, innovation and best practices. Secondly, FDI and its impact are determined by the country specific conditions in general and the policy environment in particular in terms of the ability to diversify, the level of absorption capacity, targeting of FDI and opportunities for linkages between FDI and domestic investment.
- Kulwinder Singh38 (2005) in his study "Foreign Direct Investment in India: A Critical analysis of FDI from 1991-2005" explores the uneven beginnings of FDI, in India and examines the developments (economic and political) relating to the trends in two sectors: industry and infrastructure. The study concludes that the impact of the reforms in India on the policy environment for FDI presents a mixed picture. The industrial reforms have gone far, though they need to be supplemented by more infrastructure reforms, which are a critical missing link.

India's FDI policy:

Policy regime is one of the key factors driving investment flows to a country. Apart from underlying macro fundamentals, ability of a nation to attract foreign investment essentially depends upon its policy regime - whether it promotes or restrains the foreign investment flows. This section undertakes a review of India's FDI policy framework. There has been a sea change in India's approach to foreign investment from the early 1990s when it began structural economic reforms encompassing almost all the sectors of the economy.

Pre-Liberalization Period

Historically, India had followed an extremely cautious and selective approach while formulating FDI policy in view of the dominance of "import-substitution strategy" of industrialization. With the objective of becoming "self reliant", there was a dual nature of policy intention – FDI through foreign collaboration was welcomed in the areas of high technology and high priorities to build national capability and discouraged in low technology areas to protect and nurture domestic industries. The regulatory framework was consolidated through the enactment of Foreign Exchange Regulation Act (FERA), 1973 wherein foreign equity holding in a joint venture was allowed only up to 40 per cent. Subsequently, various exemptions were extended to foreign

 ISBN: 978-81-910118-7-6

companies engaged in export oriented businesses and high technology and high priority areas including allowing equity holdings of over 40 per cent. Moreover, drawing from successes of other country experiences in Asia, Government not only established special economic zones (SEZs) but also designed liberal policy and provided incentives for promoting FDI in these zones with a view to promote exports. As India continued to be highly protective, these measures did not add substantially to export competitiveness. Recognizing these limitations, partial liberalization in the trade and investment policy was introduced in the 1980s with the objective of enhancing export competitiveness, modernization and marketing of exports through Trans-national Corporations (TNCs). The announcements of Industrial Policy (1980 and 1982) and Technology Policy (1983) provided for a liberal attitude towards foreign investments in terms of changes in policy directions. The policy was characterized by de-licensing of some of the industrial rules and promotion of Indian manufacturing exports as well as emphasizing on modernization of industries through liberalized imports of capital goods and technology. This was supported by trade liberalization measures in the form of tariff reduction and shifting of large number of items from import licensing to Open General Licensing (OGL).

Post-Liberalisation Period

A major shift occurred when India embarked upon economic liberalization and reforms program in 1991 aiming to raise its growth potential and integrating with the world economy. Industrial policy reforms gradually removed restrictions on investment projects and business expansion on the one hand and allowed increased access to foreign technology and funding on the other. A series of measures that were directed towards liberalizing foreign investment included: (i) introduction of dual route of approval of FDI – RBI's automatic route and Government's approval (SIA/ FIPB) route, (ii) automatic permission for technology agreements in high priority industries and removal of restriction of FDI in low technology areas as well as liberalization of technology imports, (iii) permission to Non-resident Indians (NRIs) and Overseas Corporate Bodies (OCBs) to invest up to 100 per cent in high priorities sectors, (iv) hike in the foreign equity participation limits to 51 per cent for existing companies and liberalization of the use of foreign "brands name" and (v) signing the Convention of Multilateral Investment Guarantee Agency (MIGA) for protection of foreign investments. These efforts were boosted by the enactment of Foreign Exchange Management Act (FEMA), 1999 [that replaced the Foreign Exchange Regulation Act (FERA), 1973] which was less stringent. This along with the sequential financial sector reforms paved way for greater capital account liberalization in India. Investment proposals falling under the automatic route and matters related to FEMA are dealt with by RBI, while the Government handles investment through approval route and issues that relate to FDI policy per se through its three institutions, viz., the Foreign Investment Promotion Board (FIPB), the Secretariat for Industrial

Assistance (SIA) and the Foreign Investment Implementation Authority (FIIA).

FDI under the automatic route does not require any prior approval either by the Government or the Reserve Bank. The investors are only required to notify the concerned regional office of the RBI within 30 days of receipt of inward remittances and file the required documents with that office within 30 days of issuance of shares to foreign investors. Under the approval route, the proposals are considered in a time-bound and transparent manner by the FIPB. Approvals of composite proposals involving foreign investment/ foreign technical collaboration are also granted on the recommendations of the FIPB. The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry, Government of India makes policy pronouncements on FDI through Press Notes/ Press Releases which are notified by the Reserve Bank of India as amendments to the Foreign Exchange Management (Transfer or Issue of Security by Persons Resident Outside India) Regulations, 2000 (notification No. FEMA 20/2000-RB dated May 3, 2000). The Government has put in place a policy framework on Foreign Direct Investment, which is transparent, predictable and easily comprehensible. This framework is embodied in the Circular on Consolidated FDI Policy, which is updated every year, to capture and keep pace with the regulatory changes, below is the updated list of sectors in which FDI is prohibited,

- Lottery Business including Government /private lottery, online lotteries, etc.
- Gambling and Betting including casinos etc.
- Chit funds
- Nidhi company
- Trading in Transferable Development Rights (TDRs)
- Real Estate Business or Construction of Farm Houses
- Manufacturing of Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes
- Activities / sectors not open to private sector investment e.g. Atomic Energy and Railway Transport (other than Mass Rapid Transport Systems)

Current FDI policy in terms of sector specific limits has been summarized below:

Sector	FDI Cap/ Equity	Entry Route
A. Agriculture		
1. Floriculture, Horticulture, Development of Seeds, Animal Husbandry, Pisciculture, Aquaculture, Cultivation of vegetables & mushrooms and services related to agro and allied sectors.	100%	Automatic
2. Tea sector, including plantation	100%	FIPB
(FDI is not allowed in any other agricultural sector /activity)		

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B. Industry		
1. Mining covering exploration and mining of diamonds & precious stones; gold, silver and minerals.	100%	Automatic
2. Coal and lignite mining for captive consumption by power projects, and iron & steel, cement production.	100%	Automatic
3. Mining and mineral separation of titanium bearing minerals	100%	FIPB
C. Manufacturing		
1. Alcohol- Distillation & Brewing	100%	Automatic
2. Coffee & Rubber processing & Warehousing.	100%	Automatic
3. Defense production	26%	FIPB
4. Hazardous chemicals and isocyanates	100%	Automatic
5. Industrial explosives –Manufacture	100%	Automatic
6. Drugs and Pharmaceuticals	100%	Automatic
7. Power including generation (except Atomic energy); transmission, distribution and power trading. (FDI is not permitted for generation, transmission & distribution of electricity produced in atomic power plant/ atomic energy since private investment in this activity is prohibited and reserved for public sector.)	100%	Automatic
D. Services		
1. Civilaviation (Greenfield projects and Existing projects)	100%	Automatic
2. Asset Reconstruction companies	49%	FIPB
3. Banking (private) sector	74% (FDI+FII).	
FII not to exceed 49%	Automatic	
4. NBFCs : underwriting, portfolio management services, investment advisory services, financial consultancy, stock broking, asset management, venture capital, custodian, factoring, leasing and finance, housing finance, forex broking, etc.	s.t.minimum apitalisation norms	
100%		
Automatic		
5. Broadcasting		
a. FM Radio	20%	FIPB
b. Cable network; c. Direct to home; d. Hardware facilities such as up-linking, HUB.	49% (FDI+FII)	
e. Up-linking a news and current affairs TV Channel	100%	
6. Commodity Exchanges	49% (FDI+FII) (FDI 26 % FII 23%)	FIPB

7. Insurance	26%-Clearance from IRDA	Automatic
8. Petroleum and natural gas :	49% (PSUs).	FIPB (for PSUs).
a. Refining	100% (Pvt. Companies)	Automatic (Pvt.)
9. Print Media	26%	FIPB
a. Publishing of newspaper and periodicals dealing with news and current affairs	S.t.guidelines by Ministry of	Information & broadcasting
b. Publishing of scientific magazines / speciality journals/periodicals	100%	FIPB
10. Telecommunications		
a. Basic and cellular, unified access services, national / international long-distance, V-SAT, Public mobile radio trunked services (PMRTS), global mobile personal communication services (GMPCS) and others.	74% (including FDI, FII, NRI, FCCBs, ADRs/GDRs, convertible preference shares, etc.	Automatic up to 49% and FIPB beyond 49%.

It is the intent and objective of the Government of India to attract and promote foreign direct investment in order to supplement domestic capital, technology and skills, for accelerated economic growth.

Industrial Growth:

Foreign direct investment (FDI) in India has played an important role in the development of the Indian economy during the recession. FDI in India has enabled India to achieve a certain degree of financial stability, growth and development. This money has allowed India to focus on the areas that may have needed economic attention and address various problems that continue to challenge the country. The factors that attracted investment in India are stable economic policies, availability of cheap and quality human resources, and opportunities of new unexplored markets

The data on FDI inflows into the country shows that foreign investors have shown a keen interest in the Indian economy ever since it has been liberalized. An increasing trend of flows can be observed since 1991 with the peak of FDI flows being reached in 2008-09. (Chart 1) Therefore the trend gives support to the fact that as and when the government has taken initiatives to open up and liberalize the economy further, the investors have welcomed the initiative and reciprocated by infusing investments into India. There are various reasons which work in favors of India and increase the level of interest shown in by foreign organization's some of them being its demographics' with

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a young population there is a huge consumer base that is to be tapped, the growing middle class, increased urbanization and awareness, rising disposable incomes. Please refer chart and table as below:

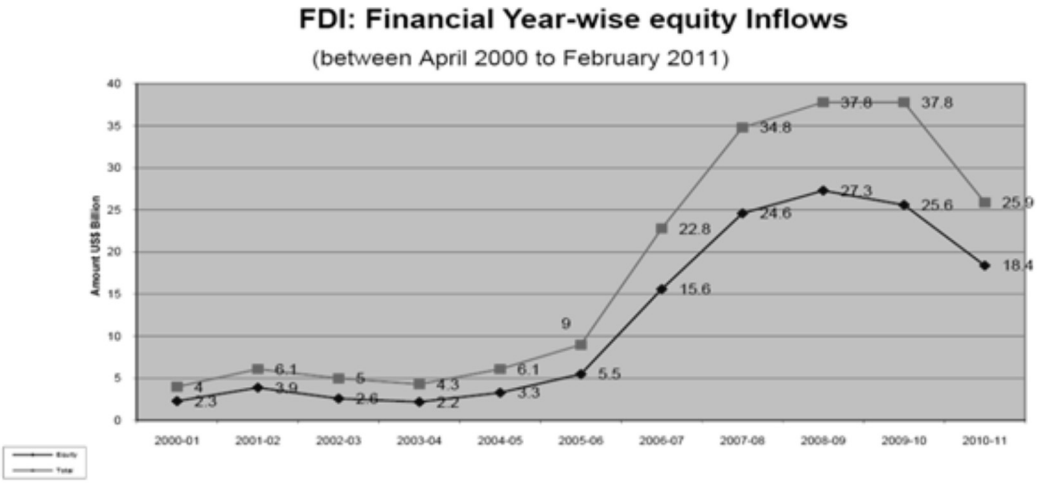


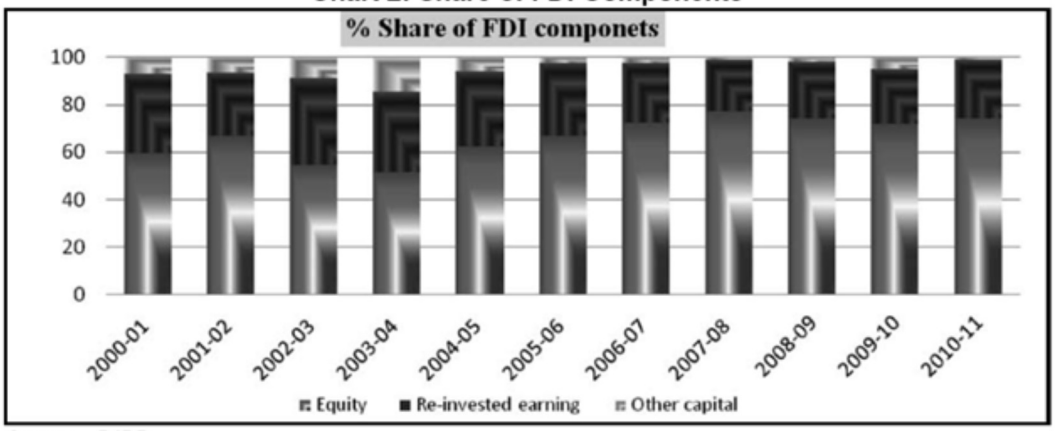
Table: 1

Year	Gross inflows/ Gross Investments		Repatriation/ Disinvestment		Direct Investment to India		FDI by India		Net Foreign Direct Investment		Net Portfolio Investment	
	₹ Billion	US $ Million	₹ Billion	US $ Million	₹ Billion	US $ Million	₹ Billion	US $ Million	₹ Billion	US $ Million	₹ Billion	US $ Million
1	2	3	4	5	6	7	8	9	10	11	12	13
2000-01	184.04	4031	0.00	0	184.04	4031	34.80	759	149.24	3272	118.20	2590
2001-02	292.69	6130	0.24	5	292.45	6125	66.15	1391	226.30	4734	92.90	1952
2002-03	246.81	5095	2.84	59	243.97	5036	88.03	1819	155.94	3217	45.04	944
2003-04	198.30	4322	0.00	0	198.30	4322	88.86	1934	109.44	2388	518.98	11356
2004-05	272.34	6052	2.87	65	269.47	5987	102.02	2274	167.45	3713	413.12	9287
2005-06	397.30	8962	2.73	61	394.57	8901	260.32	5867	134.25	3034	553.57	12494
2006-07	1030.37	22826	3.85	87	1026.52	22739	677.42	15046	349.10	7693	318.81	7060
2007-08	1398.84	34844	4.66	116	1394.21	34729	756.43	18835	637.76	15893	1106.19	27433
2008-09	1914.00	41902	7.00	165	1907.00	41737	905.00	19365	1000.00	22372	-651.00	-14031
2009-10	1796.00	37745	218.00	4638	1578.00	33107	718.00	15144	858.00	17966	1540.00	32396
2010-11	1643.00	36047	319.00	7018	1324.00	29029	783.00	17195	541.00	11834	1394.00	30293
2011-12	2198.54	46556	650.38	13599	1548.16	32957	526.79	11097	1021.37	21860	851.26	17171
2012-13	1864.98	34298	399.16	7345	1465.82	26953	387.22	7134	1078.60	19819	1465.59	26891

Note :
1. Data for 2009-10, 2010-11 and 2011-12 are provisional.
2. Data from 1995-96 onwards include acquisition of shares of Indian companies by non-residents under Section 6 of FEMA, 1999. Data on such acqu included as part of FDI since January 1996.
3. Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices.
4. Negative (-) sign indicates outflow.
5. Direct Investment data for 2006-07 include swap of shares of 3.1 billion.

There has been a change in the method of estimation of FDI inflows since 2000-01, prior to this only equity inflows was taken as the FDI inflow figure however post 2000-01 the RBI has started following the international practice and taken into account other components of FDI inflows namely re-invested earnings and other capital. A look at the contribution of various components of FDI reveals that the share of re-invested earnings was rising from 2000 onwards until 2005-06 after which it has constantly been declining. The share of equity inflows has risen sharply since 2000-01 when it stood at 59.6 per cent to 74.3 per cent in 2010-11. (Chart 2)

Chart 2: Share of FDI Components



Source: DIPP

Refer below chart and table No.3 for sector wise distribution of FDI.

Chart: 2

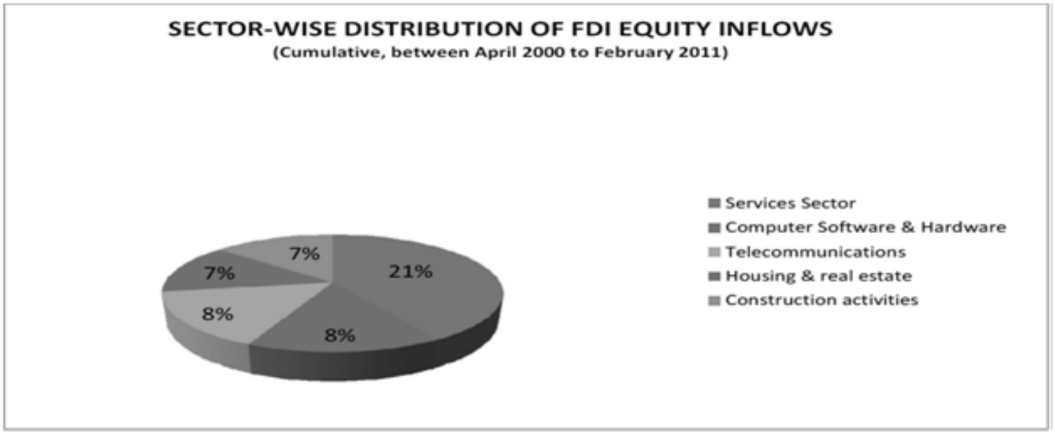


Chart: 3

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Table

Sectors Attracting Highest FDI Equity Inflows (US $ Million)

Sector	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Services Sector	543 (9.8)	4664 (37.3)	6615 (26.9)	6138 (22.5)	4353 (16.8)	3403 (17.5)
Computer Software & Hardware	1375 (24.8)	2614 (20.9)	1410 (5.7)	1677 (6.1)	919 (3.6)	784 (4.0)
Telecommunications	624 (11.3)	478 (3.8)	1261 (5.1)	2558 (9.4)	2554 (9.9)	1665 (5.8)
Housing & Real Estate	171 (3.1)	467 (3.7)	2179 (8.9)	2801 (10.2)	2844 (11.0)	1127 (5.8)
Construction Activites	151 (2.7)	985 (7.9)	1743 (7.1)	2028 (7.4)	2862 (11.1)	1125 (5.8)
Automobile Industry	143 (2.6)	276 (2.2)	675 (2.7)	1152 (4.2)	1208 (4.7)	1331 (6.9)
Power	87 (1.6)	157 (1.3)	967 (3.9)	985 (3.6)	1437 (5.6)	1252 (6.4)
Metallurgical Industries	147 (2.7)	173 (1.4)	1177 (4.8)	961 (3.5)	407 (1.6)	1105 (5.7)
Petroleum & Natural Gas	14 (0.3)	89 (0.7)	1427 (5.8)	412 (1.5)	272 (1.1)	578 (3.0)
Chemicals	390 (7.0)	205 (1.6)	229 (0.9)	749 (2.7)	362 (1.4)	398 (2.0)
Total FDI	**5540**	**12492**	**24575**	**27330**	**25834**	**19427**

Source: DIPP

Overall FDI into almost all the sectors had declined in the year 2010-11, a reason for which could be the global situation that prevailed during that time frame.

- Although services sector remain the sector attracting the highest FDI inflows since 2006-07 its share has been constantly declining.
- The FDI flows into computer hardware and software has been downward ever since 2005-06. It has drastically gone down from 24.8 per cent in 2005-06 to 4.0% in 2010-11.
- Housing & Real Estate have shown an upward trend in terms of their share in FDI inflows.
- Investments in chemicals and metallurgical industries have been erratic as no clear trend could be observed for the time period 2005-06 to 2010-11.

Conclusion:

The study reveals that FDI is a significant factor influencing the level of economic growth in India. The results of Economic Growth and Foreign Direct Investment show that FDI plays a crucial role in enhancing the level of economic growth in the country. It helps in increasing the trade in the international market. The appreciation in the value of Indian Rupee provides an opportunity to the policy makers to attract FDI inflows in Greenfield projects rather than attracting FDI inflows in Brownfield projects. FDI plays a significant role in enhancing the level of economic growth of the country. This analysis also helps the future aspirants of research scholars to identify the main determinants of FDI at sectoral level because FDI is also a sector – specific activity of foreign firm's vis-à-vis an aggregate activity at national level. Apart from the role of institutional factors, as compared to other EMEs, there are also certain sectors including agriculture where FDI is not allowed, while the sectoral caps in some sectors such as insurance and media are relatively low compared to the global patterns. In this context, it may be noted that the caps and restrictions are based on domestic considerations and there is no uniform standards that fits all countries. However, as the economy integrates further with the global economy and domestic economic and political conditions permit, there may be a need to relook at the sectoral caps (especially in insurance) and restrictions on FDI flows (especially in multi-brand retail). Further, given the international experience, it is argued that FDI in retail would help in reaping the benefits of organized supply chains and reduction in wastage in terms of better prices to both farmers and consumers. A balanced and objective view needs to be taken in this regard. Another important sector is the generation, transmission and distribution of electricity produced in atomic power, where FDI is not permitted at present, may merit a revisit. In this context, it may be noted that electricity distribution services is a preferred sector for FDI.

According to UNCTAD four out of top ten cross-border deals during 2009 were in this segment, which led to increase in FDI in this sector even in the face of decline in overall FDI. Similarly, the demands for raising the present FDI limits of 26 per cent in the insurance sector may be reviewed taking into account the changing demographic patterns as well as the role of insurance companies in supplying the required long term finance in the economy. Against this backdrop, it is pertinent to highlight the number of measures announced by the Government of India on April 1, 2011 to further liberalize the FDI policy to promote FDI inflows to India. These measures, inter alia included (I) allowing issuance of equity shares against non-cash transactions such as import of capital goods under the approval route, (ii) removal of the condition of prior approval in case of existing joint ventures/technical collaborations in the "same field", (iii) providing the flexibility to companies to prescribe a conversion formula subject to FEMA/SEBI guidelines instead of specifying the price of convertible instruments upfront, (iv) simplifying the procedures for classification of companies

 ISBN: 978-81-910118-7-6

into two categories – "companies owned or controlled by foreign investors" and "companies owned and controlled by Indian residents" and (v) allowing FDI in the development and production of seeds and planting material without the stipulation of "under controlled conditions". These measures are expected to boost India's image as a preferred investment destination and attract FDI inflows to India in the near future.

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Corporate Volunteering for Developing Cultural Capabilities and Potentials

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Abstract:

Corporate investments in large-scale developmental activities outside core businesses have been quite a long-term phenomenon in India. Some of the leading examples in this regard include investments made by the Tatas, Birlas, and Bajajs, especially, in the education and health sectors.

However, the concept of "corporate social responsibility" coming from the West has caught up as a new trend in many organizations. Among the many big developments in this area has been the fact that earlier only the corporates were involved in these activities at top leadership levels, while now this is being taken forward by employees at an individual level. This paper aims to examine this area from an India context with respect to the motivators for volunteerism, corporate practices, and benefits for the organization and employees from a cultural competence perspective.

Introduction:

India is a land where its people hold strong beliefs to their karma, the principle of cause and effect, action and reaction that governs all life. It would not be surprising that voluntarism is growing rapidly because people here are taught through religious beliefs that they are bound to reap what they sow. Volunteering is the practice of people working on behalf of others for a particular cause without getting paid for their time and services. Volunteering is generally intended to promote good quality of life. There are other reasons of volunteering as well. Some take it up for skill development, while others, for the love of meeting people and having fun.

With more Indian companies signing up their employees for volunteer work, several thousands of employees are being committed to diverse projects. The companies are from different sectors including banks and IT companies which are investing hundreds of hours. A majority of the fortune 500 companies allow their employees to volunteer during work hours. These Employee Volunteering Programs (EVPs) which are also called Employer Supported Volunteering are regarded as part of a company's sustainability efforts and social responsibility activities.

Employee volunteer programs come with many benefits. They benefit the employee, the corporation and the community. These programs should be strategic and be made meaningful and sustainable. This can be made possible by integrating both core business objectives and core competencies. Building brand awareness and affinity, strengthening trust and loyalty among consumers, are among the key factors that drive an organization

 ISBN: 978-81-910118-7-6

to take up volunteering initiatives. It also enhances corporate image and reputation, improves employee retention, productivity and loyalty. It provides an effective vehicle to reach strategic goals.

Best Practices in Organizations:

Manan Chaturvedi, an HR business partner with Pitney Bowes told SHRM, "Corporate Social Responsibility is a developing concept in India, which has been prevalent in the developed world for long. Pitney Bowes is a 91-year-old global organization which has been practicing volunteerism for long and has received several awards for its volunteering initiatives."

This corporate house in last four years of its existence in India has taken up volunteering in a big way. Volunteering at Pitney Bowes ranges from activities targeted towards increasing access to education for underprivileged children to activities related to going green concepts. Relief work during calamities, blood donation camps, and fundraising within the organization through musical events staged by employees' rock band are other activities being implemented.

At Tata Steel, it is believed that community activities help people to come to terms with realities outside the work environment and the joy of giving is most sincere when it comes from within. Volunteerism at the workplace has been a part of Tata Steel's culture from the very beginning.

A unique feature of the Tata Group is that 63 percent of the equity capital of the parent firm, Tata Sons Ltd, is held by the Tata Trusts, which are philanthrophic in nature. Ratan. N. Tata, the ex chairman of the Tata Group says, "We do not do it for propaganda. We do it for the satisfaction of having really achieved something worthwhile."

Many employees of Tata Steel across its various operations willingly choose to contribute their time and efforts to help strengthen the local communities and improve surroundings. More than 4,000 of them volunteer for relief during natural disasters, immunization drives and AIDS awareness camps. The company supports them by offering flexibility to take time off from the office for volunteer work.

HSBC has been deploying its employees in volunteering activities across its branches through its programme called 'Catalyst' since 2007. This new format is aimed at enhancing volunteer participation and covers a wide range of activities.

HSBC employees organize sale of products made by NGOs' and communities to encourage charitable giving through their Annual Helping Melas. At the Chennai facility of HSBC, employees help young students to shape their future paths through its Junior Achievement Mentoring Program.

Corporates in most cases in the Indian experience can limit their activities within the local communities given their deplorable plight. Very seldom would a corporate in India need to send its employees abroad to get in touch with hardships of daily living.

Consolidated Construction Consortium Limited (CCCL), a corporate with a significant presence in India and triggering its international visibility through an office in Middle East, practices Corporate Social Responsibility

with an avowed motive of giving back to the society. "We do this through blood donation camps, education opportunities for needy children and rehabilitating school dropouts. Being a construction company we have laborers who come from the different states of the country with their families. Our in- house schools for their children offer education in the mother tongue of the children. We are also involved in initiatives which cater to the health needs of our laborers," says Mr. B. N. V. Ramana, assistant general manager of its HR department.

Volunteering activities at Tata Consultancy Services operate through its "Maitree" initiative. Maitree was started to bring TCS associates and their families closer and to make them feel a part of the TCS extended family. Soon after, with a view to carry on the Tata tradition of enabling the community welfare, the scope of Maitree was enhanced to include socially relevant activities and endeavors.

Who Volunteers?

Employees are becoming increasingly enthusiastic. Manan feels the best way to mobilize volunteering activities in an organization is through creating awareness within the organization. Employees should be told about the role they can play and what it would give back to them in terms of self-growth and self-satisfaction. He cited the impressive indicator of an Indian employee from Pitney Bowes branch in India. Among 40,000 employees employed by the organization across the globe, this Indian received a global award for his CSR activities for the year 2011.

Selection of candidates for volunteering can never be forced. "The CSR department rolls out the communication about various activities of the departments. Those willing, can participate. Others follow the line gradually, being inspired by their colleagues who serve as role models. For example, those who were unwilling to donate blood initially, soon followed suit realizing the personal benefits of blood donation and the feeling it gives for saving someone's life out there," elaborated Manan.

At CCCL too, the volunteering programs are carried forward by engineers who are genuinely interested. The feeling of goodness it brings has a spillover effect. It soon influences other employees who slowly become interested and get involved too.

Volunteering activities become relevant for an organization when it gives back to other employees in the office and the direct beneficiaries too. Companies expect their volunteers to share their knowledge with their colleagues on what they learnt, how life could be different or similar so that knowledge is shared.

"Employee volunteering gives back personal satisfaction, and an increased humanitarian approach towards life. It increases work performance and is leading to inclusion too," Ramana told SHRM India online.

Developing Cultural Capabilities and Potentials:

Voluntary programs and diversity initiatives are generally treated as distinct programs. However, companies are

 ISBN: 978-81-910118-7-6

increasingly discovering the natural link between the two and leveraging it to support both initiatives.

The advantages of volunteering activities are trifold and can be elaborated as follows:

1. Diversity and inclusion develops within the organization. Acceptability of people from different backgrounds and the physically challenged, too, increases.
2. One's sense of responsibility towards society increases.
3. The above two elements culminate into an important takeaway for an organization in the form of employee branding and increased visibility.

Corporate practices in using volunteering to develop cultural competence are still emerging. They are not sufficiently developed to spell out parameters of success or best practices. One of the reasons for the same could be that employees are most comfortable "reaching out" to serving the most deprived. Critical analysis of the present scenario of volunteering in the country reveals that most activities are targeted towards increasing health and education levels of the people from the lower socio-economic status. With an increase in the number of NGOs working with such communities, it becomes easier to reach out to the needy groups and render them services. However, there are also other critical areas of importance which need to be looked into to increase development within the organizations themselves. For example, every organization would consist of employees from diverse backgrounds who might be encountering problems day to day in their work life due to problems with language and communication skills. They might be stuck at a certain level struggling to reach the next rung in the organizational hierarchy. Organizations could consider volunteering to help within the organization so that employees can mutually help one another to overcome these hurdles.

Next steps of Volunteering:

Wipro's Mission 10X program is an initiative where, through this movement, Wipro aims to prepare engineering students by equipping them sufficiently for dynamic and successful careers. This is achieved by empowering engineering faculty with new methods of teaching. Since its launch on Teachers Day, September 5, 2007, Mission 10X has gained tremendous momentum and recognition and has spread over to 868 colleges across 23 states in the country. This movement is enhancing the quality of human capital and helping India move forward towards global competitiveness.

Volunteering opportunities, when done right, can provide employees and leaders with rich opportunities to build cultural competence and inclusive workplaces-that is, if an organization makes a connection between volunteering and diversity. If future CSR initiatives look beyond the traditional areas and identify other crucial spots where development is needed, much more needed changes can be achieved.

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ISBN: 978-81-910118-7-6

An Analysis of Credit and Economic Growth during Reforms (1991 to 2012)

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Abstract:

Since the beginning of the 1990's, the Indian economy has been undergoing economic reforms which include financial sector reforms among others. This paper analysis relationship between the two variable i.e. GDP growth and credit growth is also measured through correlation and regression. The analysis shows that the credit and the deposit of the commercial banks grew during the latter part of the reforms this increased growth in the credit has further paved the way for the economic growth. Further, it also shows that there is a positive and significant relationship between the economic growth and the credit growth.

Key Words: *Bank Credit, Economic Growth, GDP Growth.*

Introduction:

While it is widely recognized that economic growth is related to financial development and structure. Reflecting the success of financial sector reform, the Indian economy witnessed rapid progress during the post reform period, notwithstanding the episodes of contraction in the economy during the late 1990s and the early part of the current decade due to various adverse external and domestic developments such as the Asian crisis, the world recession and the poor monsoon. In a bank-dominated financial system as in India, bank credit plays a critical role in monetary policy operations. Bank credit is considered to be crucial in economic policy due to its powerful influence on investment and consumption spending through facilitating financing of deficit spenders. Its relevance is not only confined to demand side analysis of the economy as credit also supports capacity creation through financing long term projects as well as working capital. It is easy to understand how rapid credit growth facilitates economic growth. When credit is expanding, consumers can borrow and spend more and businesses can borrow and invest more. Increasing consumption and investment creates jobs and expands income and profits. Moreover, the expansion of credit tends to cause the price of assets such as stocks and property to increase, thereby boosting the net worth of the public.

Objective of the study:

The main objectives of the study are as follows:

1. To determine the trends in the credit and deposits of the commercial banks.
2. To understand the relationship between credit growth and economic growth.

 ISBN: 978-81-910118-7-6

3. To examine the impact of credit of commercial banks on the economic growth.

Hypothesis:

H0. There is no correlation between the credit of commercial banks and GDP of India.

H1. There is a significant impact of credit of commercial banks on GDP of India.

Literature Survey:

[1]Ayadi Rym, Arbak Emrah, Sami Ben-Naceur and Willem Pieter De Groen (2013) paper explores the relationship between financial sector development and economic growth, using a sample of northern and southern Mediterranean countries for the years 1985-2009. The authors have included several variables to measure the development of the financial sector to account both for quantity and quality effects. The results indicate that credit to the private sector and bank deposits are negatively associated with growth, which confirms deficiencies in credit allocation in the region and suggests weak financial regulation and supervision. On the stock market side, the results seem to indicate that stock market size and liquidity play a significant role in growth, especially when accounting for the quality of an institution. Investment, whether domestic or in the form of FDI, contributes significantly to economic growth. Stronger institutions and low inflation are key growth factors. Initial GDP has a persistently and significantly negative impact on growth, which implies that poorer countries are catching up richer countries in terms of economic growth.

[2]Banerjee Krittika (2011) paper studies the lead-lag pattern in the interaction between credit and growth cycles of India at three levels i.e. at the aggregate level for annual GDP growth, at the sectoral level across agriculture, industry and services and also across major industries. The study focuses on three distinct periods, viz., 1950-51 to 1979-80, 1980-81 to 1990-91 and the post-1991 period and finds that there has been a significant transformation in the direction of credit-output causality during the period of analysis-from output being predominantly driven by credit in the pre-1980s period to nearly no relationship between the two during the 1980s and further to credit being primarily driven by output in the post-reforms period. For the non-agricultural sector as a whole, unidirectional causality from output to credit in the post-reforms period reiterates the importance of output in determining the quantum of flow of credit to non-agricultural sector in India. However, at the industry level, the study finds that a few industries exhibit bidirectional causality, indicating higher risks from procyclicality. Most strikingly, the study finds that the credit intensity of growth declines only in the second half of the contractionary phase of the business cycle, which generally continues in the first half of the expansionary phase of the business cycle. Similarly, the increase in credit

Intensity becomes more visible only in the second half of the expansionary phase, which persists in the first half of the

contractionary phase of the business cycle. The study finds a lead role of credit for some industry groups which suggests that monetary and macro-prudential policies could at times operate through shifts in credit trends in managing inflation and promoting financial stability. However, in general, the absence of causality from credit to output growth in the post-reforms period emphasizes the need for more directed flow of and easy access to credit to all sectors for monetary policy to have the desired impact on output growth in the economy.

[3] Hussain Farah, Chakraborty Dev Kumar (2012) study aims to examine empirically the relationship between Financial Development and Economic Growth and their causality in the context of Assam, a state in India. The method of Principal Component is employed to construct a financial depth indicator (IFD) that serves as a proxy of financial development in the study. Using time series techniques, the stationarity properties of the data sets are tested, followed by Johansen and Jesulius Cointegration analysis to examine long term relationship between the two variables. The study finds a cointegrating relationship between them. Further, Granger causality tests suggest that Financial Development causes Economic Growth in case of Assam. The impulse response function has been traced out for both the variables. It can be inferred from the study that, financial development in Assam needs to be plunged as it is an important channel through which economic growth nourishes.

[4] Kelly Robert, McQuinn Kieran and Stuart Rebecca (2013) paper examines the issue of the steady-state relationship between private sector credit and GDP in the case of Ireland, a country which, even by international standards, experienced a sizeable expansion in credit over the past 10 years. The rapid increase in credit in an economy is now commonly perceived to be one of the leading indicators of financial stability. This view has been reinforced by the aftermath of the international financial crisis, which commenced mid 2007. A key policy response has been to focus on the ratio of private sector credit to GDP for an economy, observing, in particular, significant deviation between the actual and long run trends of ratio.

[5] Misra P. K., Das K. B. and Pradhan B. B. (2009), paper examines the issue of causal relationship between credit market development and economic growth is very crucial in an emerging country like India especially in the after-math of the global credit crisis. A developed credit market efficiently allocates resources for higher economic growth. Thus, realising the importance of credit market development, this study examines the direction of causality that runs between credit market development and the economic growth in India for the period 1980 to 2008. The ADF unit root test indicates that the variables of the study are stationary in their second differences. The Johansen Cointegration test suggests the existence of long-run equilibrium relationship between the variables of credit market development and economic growth. In the VAR framework the application of Granger Causality Test provides the evidence in support of the fact that credit market development spurs

 ISBN: 978-81-910118-7-6

economic growth. The empirical investigation indicates a positive effect of economic growth on credit market development of the country.

[6] Mohammed Haruna Aliero, Zakari Yahya Abdullahi and Nasiru Adamu (2013) paper analyses the relationship between private sector credit and economic growth in Nigeria, using time series data for the period of thirty-seven (37) years (1974-2010). In analyzing the data the paper used Autoregressive Distributed Lag (ARLD) bound F-test for cointegration. The results indicated that a long run equilibrium relationship exists between private sector credit and economic growth, when private sector credit was used as dependent variable. However, causality results indicate that there is no causal relationship between private sector and economic growth in Nigeria. Therefore the empirical findings of this research implied that while "demand following hypothesis" prevailed in the long run relationship between private sector credit and economic growth in Nigeria, non-causal impact between private sector and economic growth on the other hand indicates the prevalence of the Schumpeterian "independent hypothesis" on the Nigerian economy. Finally, the study recommends long-term investment loan to the productive private sector in addition to the need for comprehensive policies and strong legal framework for easy disbursement and quick recovery of private sector credit.

[7] Ray Sarbapriya (2013), studies the association between economic growth and financial development has been a wide-ranging subject of experiential research. The practical evidence suggests that there is a significant positive relationship between financial development and economic growth. However, these findings do not establish the direction of causality between the two. The question, therefore, is whether financial development causes economic growth or vice versa. In view of the above discussion, the article attempts to explore the relationship between financial development and economic growth in Indian context using granger causality test for the period, 1990-91 to 2010-11. The estimated results confirmed that financial development, measured by ratio of gross domestic capital formation to GDP, ratio of gross domestic savings to GDP, etc are non-stationary at the level data and at the first differences when using ADF test but attains stationary at first difference while using PP test. The Granger- causality test finally confirmed that financial development granger causes economic growth in India between time span of 1990-91 to 2010-11. Therefore, financial development in India has a stronger role in the growth process. The implication of the above is that India is in a better state of affairs as far as the growth potential is concerned by way of a more efficient financial system that is likely to evolve in the upcoming years to suit the changing global pursuit.

[8] Prabirjit Sarkar paper analyses the relationship between expansion of domestic credit to private sector relative to GDP and growth for a sample of 65 less developed countries over a long period, 1980-2006. Using causality tests at various lag-orders we find a strong evidence of mutual causation. We have used alternative dynamic panel

data models such as mean group, pooled mean group and dynamic fixed effect. Hausman test suggests dynamic fixed effect model. While the mean group model suggests no relationship in either direction, the other two models show two opposite long-term relationships: credit –to-growth relationship is negative whereas growth –to-credit link is positive.

In light of the above this paper examines the trends and the relation ship between the economic growth and the credit during the reform period. This because it has been extensively argued that economic growth can be enhanced through the promotion of credit. In the third section methodology has been discussed; section four deals with the analysis of findings. Section five concludes the paper.

Methodology:

The paper is based on the secondary data. The time series date has been collected from the various sources such as RBI publication, NABARD publications, from 1991 to 2012.

For the analysis in this paper various statistical tools such as graph, simple growth, Correlation and regression has been used.

Findings:

The credit of commercial banks has shown the growth of 19.08 per cent and deposits grew at 17.50 per cent during the study period 1991-2012 and economic growth (measured by GDP) has witnessed 6.57 per cent growth. The trend in the growth is depicted through the line graph. (See Graph 1)

Further, the deposits as well as credit of commercial banks have shown a higher growth (i.e. deposits, 17.57% and credit, 21.45%) during the 2001-12 as compared to 1991-00. Similar, trend has been shown by the per capita deposit and per capita credit.[1] This also shows that the growth of credit is higher than the growth of deposit; credit deposit ratio has also registered the higher growth (3.34%) during the latter part of the reform period as compared to the initial ten years of reforms.[2] It shows that banks have created more credit from their deposits. (See, Table 1)

Table 1: Average annual growth of major variables.

	Variables/ Years	1991-2000	2001-12	19991-12
1	Deposits of Scheduled Commercial Banks	17.41	17.57	17.5
2	Credit of Scheduled Commercial Banks	15.91	21.45	19.08
3	Per Capita Deposits of Scheduled Commercial Banks	15.28	15.72	15.53
4	Per Capita Credit of Scheduled Commercial Banks	13.81	19.54	17.09
5	Credit Deposit Ratio	-1.16	3.34	1.41
6	Investment Deposit Ratio	-0.25	-1.55	-1.00
7	Cash Deposit Ratio	-5.16	-3.00	-3.93

 ISBN: 978-81-910118-7-6

8	Deposits of Scheduled Commercial Banks as % of N.I	1.32	3.63	2.64
9	GDP	5.79	7.15	6.57

Source: Calculated from RBI Hand Book

The decadal analysis has shown that during the latter part of the reform period (i.e. 2001-12) commercial banks credit, deposits and credit deposit ratio has shown the rising growth along with the higher economic growth (GDP). An in depth investigation further reveals that it was the period 2006- to 2010 when all the major variables such as Credit, Deposits, Per capita deposit and per capita credit as well as the economic growth had witnessed the higher growth as compared to the precious years. However, credit deposit ratio and investment deposit ratio has exhibited the higher growth during 2001-05. (See, Table 2). This also shows that credit growth is always greater than the deposits of the commercial banks during all the sub- periods except during 1991-95. Credit deposit ratio has also witnessed positive growth after 2001.[3]

Table. 2: Trends in variables (Quinquennium average of growth rate (%)

	Variables/ Years	1991-95	1996-00	2001-05	2006-10	2008-12
1	Deposits of Scheduled Commercial Banks	17.75	17.13	15.28	21.01	17.78
2	Credit of Scheduled Commercial Banks	15.05	16.6	20.01	23.78	19.04
3	Per Capita Deposits of Scheduled Commercial Banks	15.7	14.95	13.63	18.82	15.78
4	Per Capita Credit of Scheduled Commercial Banks	13.06	14.42	18.29	21.55	17.01
5	Credit Deposit Ratio	-2.1	-0.4	4.2	2.24	1.12
6	Investment Deposit Ratio	0.73	-1.03	2.69	-5.53	-0.55
7	Cash Deposit Ratio	-0.16	-9.17	-5.79	0.67	-3.27
8	Deposits of Scheduled Commercial Banks as % of N.I	-0.78	3	5.13	4.86	0.59
9	GDP	4.49	6.84	5.65	8.14	7.81

Source: Calculated from RBI Hand Book.

From the above analysis it becomes evident that the latter period of reforms not only helped the banks to promote more credit but also has pushed the economic growth. But how far this growth in credit has influenced the economic growth is a matter of interest. Graph 2 exhibits the trends in economic growth and credit growth during the study period. A log-linear trend line is fit to the data to examine the trend, the trend line shows the higher growth of credit as compare to the economic growth, but both the variables have indicated a positive and gradual growth during the period. Table 3, shows the descriptive statistics of variables selected i.e. GDP and

credit. The mean growth of GDP for the duration selected is 6.57%, where as for credit growth it is 19.77%. The median point is 6.65% and 17.51% for GDP growth and Credit growth respectively. The kurtosis is -0.48 for GDP data and -0.04 for credit. The standard deviation is 2.49 for GDP growth and 6.89 for Credit growth; this shows higher variability in the credit growth as compared to GDP.

Table 3: Descriptive Statistics of Economic growth and Credit Growth (1991 to 2012)

Growth rate of Credit	
Mean	19.07762476
Standard Error	1.503789071
Median	17.51270368
Mode	#N/A
Standard Deviation	6.891227246
Sample Variance	47.48901295
Kurtosis	-0.042411551
Skewness	0.332900218
Range	26.29189574
Minimum	7.753910539
Maximum	34.04580628
Sum	400.63012
Count	21
Largest(1)	34.04580628
Smallest(1)	7.753910539
Confidence Level(95.0%)	3.136849025

Growth Rate of GDP	
Mean	6.571570593
Standard Error	0.538844213
Median	6.658936807
Mode	#N/A
Standard Deviation	2.469294393
Sample Variance	6.097414798
Kurtosis	-0.481740041
Skewness	-0.352589478
Range	9.489521995
Minimum	1.05685947
Maximum	10.54638146
Sum	138.0029825
Count	21
Largest(1)	10.54638146
Smallest(1)	1.05685947
Confidence Level(95.0%)	1.124009328

The relationship between the two variable i.e. GDP growth and credit growth is also measured through correlation and regression. The value of correlation is estimates to be 0.57, indicate that there is positive relation between economic growth and growth in the credit of commercial banks. But, here regression tool is also used for estimating the relationship. Table 4, exhibits the result of regression.

Table 4: Regression Result

Regression Statistics	
Multiple R	0.571047
R Square	0.326094
Adjusted R Square	0.290625
Standard Error	2.079748
Observations	21

	Coefficients	Standard Error	t Stat	P-value
Intercept	2.667909	1.36508	1.954398	0.065532
Credit Growth	0.20462	0.067484	3.032136	0.006856

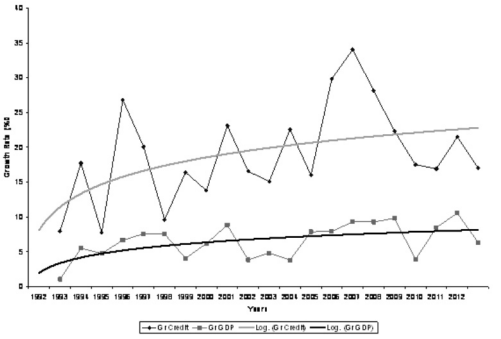
 ISBN: 978-81-910118-7-6

Regression analysis shows that the credit of commercial banks has a positive and significant impact on the economic growth our country. Although the model's R square is 0.326 which specifies that the 32% of variation in the GDP is explained by the credit growth.[4] The coefficient of credit growth is significant as it can be seen by the T statistic. The p value for coefficient of the credit growth is also less than 0.05. From this it can be said that the credit growth have a significant impact on the GDP of India, thus rejecting the null hypothesis.

Conclusion:

The analysis shows that the credit and the deposit of the commercial banks grew during the latter part of the reforms this increased growth in the credit has further paved the way for the economic growth. Further, it also shows that there is a positive and significant relation ship between the economic growth and the credit growth. This further shows the role played by the financial sector in the overall growth of the economy.

Graph 1: Growth rate of Credit, Deposit and GDP



Graph 2: Economic Growth (GDP) and Credit Growth (1991 to 2012)

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[1] Per capita deposits registered the growth of 15.72% during 2001-12, as compared to 15.28% during 1991-2000. Per capita credit grew from 13.81% in 1991-2000 to 19.54% during 2001-2012.

(See Table 1)

[2] Credit-deposit ratio is the ratio of how much a bank lends out of the deposits it has mobilised. It indicates how much of a bank's core funds are being used for lending, the main banking activity. A higher ratio indicates more reliance on deposits for lending and vice-versa.

[3] The ratio gives the first indication of the health of a bank. A very low ratio indicates banks are not making full use of their resources. And if the ratio is above a certain level, it indicates a pressure on resources.

[4] A higher R square is not evidence in fovour of the model and a low R square is not evidence against it. (See: D.N.Gujarati)

ISBN: 978-81-910118-7-6

WhatsApp: The New Text Messenger and its Impact on Students

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Abstract:

With the advent of instant mobile messaging applications, traditional SMS is in danger of loosing it's reign as the king of mobile messaging. Applications like WhatsApp allow mobile users to send real-time text messages to individuals or groups of friends at no cost. While there is a vast body of research on traditional text messaging practices, little is understood about how and why people have adopted and appropriated instant mobile messaging applications. The goal of this work is to provide a deeper understanding of the motives and perceptions of a popular mobile messaging application called WhatsApp and to learn more about what this service offers above and beyond traditional SMS.

To this end, we present insights from a research study – a questionnaire highlighting that while WhatsApp offers benefits such as cost, sense of community and media privacy preserving technology for mobile communication.

Key Words: *WhatsApp, social networking, impact, life style.*

Introduction:

"Social media spark a revelation that we, the people, have a voice, and through the democratization of content and ideas we can once again unite around common passions, inspire movements, and ignite change."

— Brian Solis, Engage: The Complete Guide for Brands and Businesses to Build, Cultivate, and Measure Success in the New Web

Social media is a great tool to be in touch with your friends, family members and neighborhood. It helps us to expose ourselves. Youth generally uses WhatsApp to communicate with their friends, upload photos and to know what is going on around. Using it has a lot of advantages as it can connect us from people which are miles away from us. However, there are also some disadvantages of it if we use it for long hours as it kills our time and there are also chances of cyber bullying. It is also good platform to learn more about our world day to day activities.

Some people are using this as a platform to find job opening etc. Business organization can use social networking for advertising new product and promoting their services. According to Indian survey Indian youngsters use this kind of social networks 2 hours per day. We can improve ourselves by sharing our ideas, information

 ISBN: 978-81-910118-7-6

and knowledge and by discussing with the people, who have same interests, even if they are so many miles away from us. Teachers and professors are making groups to extend classroom discussion to posting assignments, tests and quizzes, to assisting with homework outside of the classroom setting. Many companies are developing interactive communities that connect individuals to share business needs & experiences. Students are making a network with professionals for job opportunities and internships. We can find our friends easily, if we lost contact. Generally WhatsApp has a positive atmosphere.

The first recognizable social networking site is SixDegrees which was launched in 1997. Till now, there are more than 200 social networking sites are in the internet. In 2011, based on research, the global average of which access daily the social networking sites accounts is 46%. Facebook, launched in 2004, has become the largest social networking site in the world.

No doubt WhatsApp is becoming the most powerful and fast form of social media for communication today. Social networking like Facebook, twitter, LinkedIn, WhatsApp, and many more uses among more than billion of people today. As in the digital age social networking is used for meeting new friends, old friends, connecting with family members globally, sharing ideas, photos.

Apart from above advantages, definitely every technology has a bright side as well as well dark side too. So, yes it has negative impact on society too. If we will use it in excessive, than definitely it will becomes a time killer for students.

Over the past decade, WhatsApp or the social networking websites like Facebook, Twitter, Orkut, etc have played a huge role in shaping the lives of students. The past year has seen several notable revolutions taking place through social media as a platform. On the other hand, it may be argued that WhatsApp is a waste of time owing to the fact that the youth mostly use it as a medium to chat or communicate with friends and peers which does not yield any productive result. The addiction of WhatsApp takes a toll on their hobbies such as literature, music, gardening, scientific experiments, etc. The sudden jump in the popularity of WhatsApp has given rise to cyber crimes, as there is lack of privacy and users don't hesitate to post personal information or photographs in these mediums.

Social media websites are not just a tool for networking but also an important tool of social activism. A Times of India report dated December 26, 2012, quotes a student as saying, "After the recent gang rape in Delhi, I don't just Log on to Facebook for fun anymore. Instead, I'm using it as a tool to spread awareness among my friends," proves that it is not just a pastime anymore.

What is WhatsApp?

WhatsApp is an application available on iOS (iPad and iPhone), Android, Blackberry and Nokia that allows users to send text messages to each other. Initially that does not sound very special, does it? That's because a few key features have been left out.

WhatsApp lets you send texts for free. Yes, 100% free. You will never be charged for a text sent through WhatsApp. This is because WhatsApp sends messages through an internet data connection. This is one reason that WhatsApp iPad is available; usually the iPad is not able to send text messages. However, with this application it is.

WhatsApp is cross platform. Regardless of whether you have WhatsApp installed on your iPad, Blackberry, Nokia or Android phone, you will be able to send messages to anybody who also has WhatsApp installed. This is one feature that allows it to be a step up from Blackberry Messenger - although BBM is a great service it is only good for people who have Blackberry phones.

WhatsApp supports many different message types, from simple text to pictures to audio files. Usually a MMS message would cost a fair bit of money to send (I got charged $0.40 for a picture message once!) so the fact that these can be sent to as many friends as you like for free is great.

Instant messaging has become the killer app on mobile as smart phone adoption has grown across the globe and the Indian scene is no exception. Three out of every four smart phone user in India is now high on mobile chatting making the market a lucrative one for chat app companies.

WhatsApp reigns supreme among mobile chat app with about 76% of smart phone users in India using it to text each other, revealed a recent study on smartphone usage in India by Informate Mobile Intelligence.

Google products such as Google Play, Google Search, Gmail, Googlemaps, Youtube, Google hangouts are the most sought after apps of 2013, the study said.

Though 2013 saw a number of chat app brands including WeChat, Line, BB messenger for Android etc, WhatsApp leads the category.

These chat apps have already undermined cell phone carriers' traditional SMS text messaging, which are reported to have declined for the first time in 2012, Mumbai-based senior telecom analyst said.

Literature Review:

Adamic, Lada, Buyukkokten,Orkut, and Eytan Adar. (2003). In this research the researchers have suggested that the excessive use of new technologies (and especially online social networking) may be particularly addictive to young people which may cause some bad or negative impact on people life .

Nyland R, Marvez R, Beck J.(2007): there are pros and corn of social networking sites some studies have highlighted a number of potential negative correlates of extensive social networking usage. For instance, the results of an online survey of 184 Internet users indicated that people who use social networking more in terms of time spent on usage were perceived to be less involved with their real life communities

Boyd DM, Ellison NB. (2008): the history of social networking sites for

 ISBN: 978-81-910118-7-6

socialization says, the first social networking site (SixDegrees) was launched in 1997, based on the idea that everybody is linked with everybody else via six degrees of separation

Cohen E (2011): The author mention many cases shows the impact of use of social networking on various people at various level for example a young mother is wasting time on facebook instead helping kids in studies. The company employees are more focus on facebook instead of company work. The authored coated in his article "I'm an addict. I just get lost in Facebook" replies a young mother when asked why she does not see herself able to help her daughter with her homework. Instead of supporting her child, she spends her time chatting and browsing the social networking site . further some people share their experience like when problems arise when users ignore family and work obligations because they find the Facebook world a more enjoyable place to spend time than the real world.

Karen Church, Telefonica Research, and Rodrigo de Oliveira, Telefonica Research (2013): the researchers were discussed on topic "What's up with WhatsApp? Comparing Mobile Instant Messaging Behaviors with Traditional SMS" mention that instant mobile messaging applications, traditional SMS is in danger of loosing it's reign as the king of mobile messaging. The main goal of this work is to provide a deeper understanding of the motives and perceptions of a popular mobile messaging application called WhatsApp and to learn more about what this service offers above and beyond traditional SMS. WhatsApp application allows mobile users to send real-time text messages to individuals or groups of friends at no cost hence it is very popular among the youth. The study was based on an interview and a large-scale survey which highlighting that while WhatsApp offers benefits such as cost, sense of community and immediacy, SMS is still considered a more reliable, privacy preserving technology for mobile communication.

Basma Issa Ahmad Alsaleem (213): the paper entitled "The Effect of "WhatsApp" Electronic Dialogue Journaling on Improving Writing Vocabulary Word Choice and Voice of EFL Undergraduate Saudi Students" though the WhatsApp is messaging tools and sharing information such tool may be helpful in academic for education purpose the main purpose of this study was to discover the effect of WhatsApp. The researcher used survey and interview techniques to obtain the data. The study was concluded with new technology WhatsAapp is a valuable tool for teachers to use with their students. Further study said that student's skills can be improved with WhatsApp electronic journaling in a relatively short period of time.

The Effect Of WhatsApp On Students:

WhatsApp is an instant messaging application that is changing the world of social relations. And it's free!

It's great technology; it facilitates interaction and the exchange of information

in real time. The main novelty with respect to other communication channels is that WhatsApp displays the user's information; you can see if the user is online, their chosen profile picture and, most of all, whether or not the user has read your message.

Unfortunately, WhatsApp is also causing family crises and tension among friends. Suspicion arises when the sender of the message sees that the receiver has read the message but does not instantly respond. Unlike unanswered emails and phone calls, instant messaging applications require immediate response. This is the perfect channel to enhance relations in the first phases of infatuation, but then it can lead to problems if one person becomes obsessed.

Objective of the study:

1. To study the level of occupancy among student over WhatsApp.
2. To find purpose behind the usages of WhatsApp
3. To study the impact of WhatsApp among student

Scope and limitation

1. This paper is only focusing on the impact of WhatsApp on the students.
2. The study is only limited to student using WhatsApp.
3. This study is limited to SIOM student who are pursuing MBA.
4. This paper is not covering any other on line social messenger applications.

Research Methodology:

This is descriptive and exploratory research.

Data collection

Primary data is collected through structured survey.

Data Analysis

Ms Excel use to analyze the data

Sample Size

90 students for Pune Sinhgad College Vadgaon Campus.

Sampling Technique

Judgmental non probability sampling technique.

Focus group

A structured discussion ensued about the preliminary survey questions, to check expectations about answers and test the students' reaction to the results. The researchers compared the participants' individual answers to the preliminary survey questions and found that some answers aligned, while others diverged among them. From this, they understood the participant's methodology and thought processes in analyzing and answering the questions.

Survey Distribution

A 7-question survey was created on SurveyMonkey.com and included questions with one optional open-ended short answer question. The survey was distributed to students studying in SIOM. The survey was open for 10 days from February 2, 2014, to February 12, 2012.

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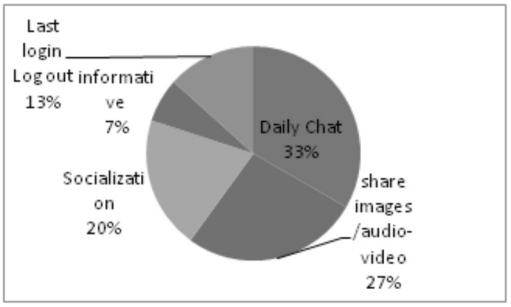
Data analysis and findings

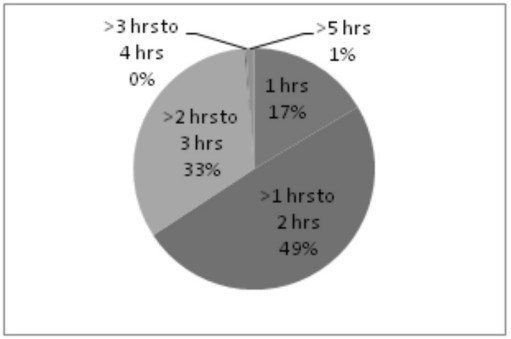
The survey was completed by a total of 90 total students. The survey results are as follows.

Question 1.What is the purpose of use of WhatsApp?



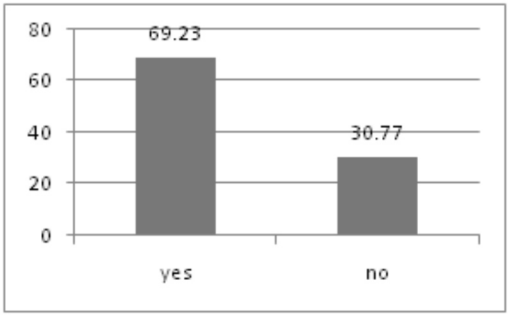
Interpretation:

Question 2. How much time you are using on WhatsApp daily?



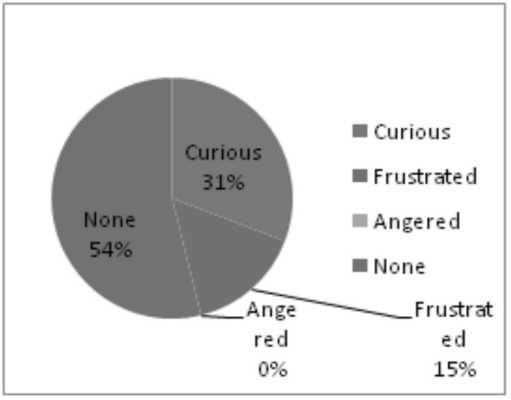
Interpretation: Most respondents (49%) spend more than 1-2 hours online per day, with a close second (33%) spending 2-3 hours online per day. Third was 17% with 1 hour per day, fourth was 1% with 5 hours per day and fifth was 0% more than 3-4 hours per day.

Question 3.Are you addicted of use of WhatsApp?



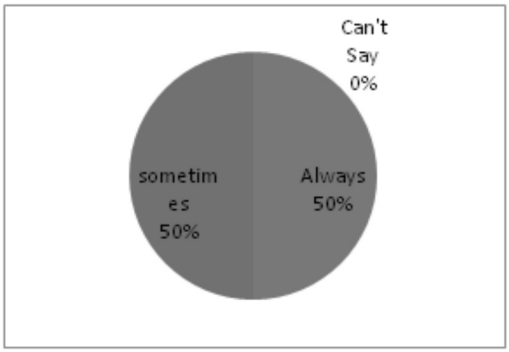
Interpretation: Majority of students (69.23 %) agreed that they are addicted to WhatsApp in comparison to 30.77% who believed that they are not addicted to WhatsApp.

Question 4. What is your reaction when there is no communication on WhatsApp?



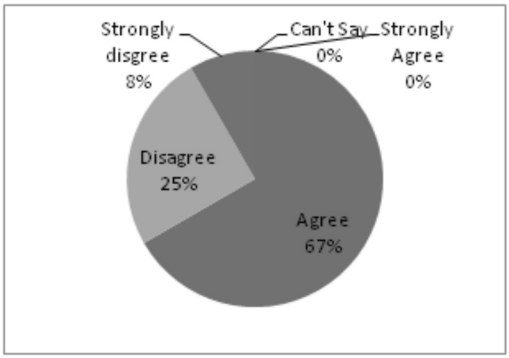
Interpretation: Most respondents (54%) have no reactions when there is no communication on WhatsApp. Followed by 31% respondents who gets curious and 15 % respondents who gets frustrated when there is no communication on WhatsApp.

Question 5. Is WhatsApp Useful?



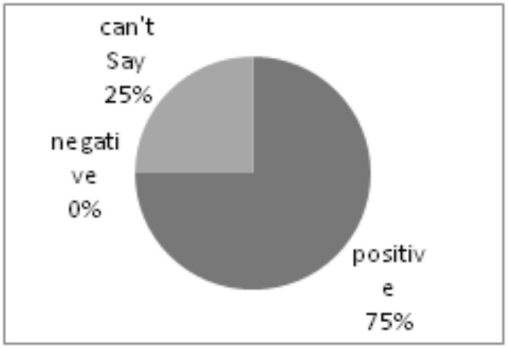
Interpretation : Maximum of respondants viz. 83% consider the usage of WatsApp to be useful in comparison to 17% who feel that Whatsapp is not useful.

Question 6. Does your time management get affected with the use of WhatsApp?



Interpretation : Most respondents (67%) agreed that their time management gets affected with the use of Whatsapp whereas 25% respondents disagreed and 8% strongly disagreed that with the use of WhatsApp their time management gets affected.

Question 7. What is impact the impact of WhatsApp on you?



Interpretation : Majority of respondents 75% believed that they had a positive impact of WhatsApp whereas 25% respondents were not sure of any impact of WhatsApp in their life. No respondent had a negative impact of WhatsApp in their life.

Conclusions & Implications:

According to the data from this study, students have mostly unified opinions about the social media tools that they use, and the affect of social networking in their own lives and on society at large. However, there are some areas where their answers diverged, particularly in Question 7- Responses to this question ranged from opinions that WhatsApp has more positive effects than negative effects, to opinions that the effect of WhatsApp depends on the type of person participating. To assess how WhatsApp influences typical students's real social activities and values, we must place emphasis on the responses to this question.

 ISBN: 978-81-910118-7-6

69.23% of respondents believed that they are addicted to WhatsApp and at times, it degrades personal relationship bonds, because these social activities are a very important part in Indian culture and cannot be ignored. According to one of the responses, "WhatsApp has many positive effects to the students though it may affect people's behaviors as it results in less real social connection."

Conversely, many responses to the same question indicate that WhatsApp has a positive influence and adds benefits to students' life, such as communicating with family and friends, opening different cultures to each other, and making social relationships stronger. The combined essence of two responses indicated that, despite the long distance between students and their families and friends they feel like they are geographically closer just through their use of WhatsApp. Indeed, the vast majority of responses to questions on the survey indicate that keeping in touch with friends and family are important to students.

Social media has been determined by students to be a convenient, cost-efficient, and effective way to build new connections and foster existing relationships. WhatsApp offers a wide array of features, regardless of some disadvantages, such as the potential for decreasing human face-to-face contact. The popularity of WhatsApp tools continues to rise, and people continue to adjust their lives accordingly to reap the greatest benefits these tools have to offer.

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ISBN: 978-81-910118-7-6

Impact of Culture on Merger and Acquisition: Challenges and Opportunities

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Abstract:

Organizations deal with its environment; respond to uncertain environmental changes for its survival. Many organizations struggle for this survival due to competition, scarcity of resources and uncertainty. In such situations organizations' most popular strategies for growth and competitivenessis Merger and Acquisition (M & A).

Yet studies show that many—if not most—mergers are failures. The failures result in poor shareholder results, layoffs and in some cases a complete dissolution of the merger. According to a KPMG study, "83% of all mergers and acquisitions (M & A) failed to produce any benefit for the shareholders and over half actually destroyed value." The cause for this failure is the people and the cultural differences. Corporate culture is focal point to the success of mergers and acquisitions (M & A). But it is ignored in financial analysis - valuing the assets, determining the price and due diligence etc.

This study attempts to examine impact of culture on Merger and Acquisitions, challenges faced and managing the culture for opportunities. The study reviews the existing literatures on culture in context of M & A, helping to overcome the challenges faced and summarizes the key findings contributing towards successful Merger & Acquisition.

Introduction:

Mergers and acquisitions (M&As) have become the dominant mode of growth for firms seeking competitive advantage in an increasingly complex and global business economy (Adler, 1997).But when it comes to evaluating the success of M&A only financial management is looked upon considering all assets and liabilities; neglecting the main resource behind the organizations; Human Resource.At the start transaction papers are signed andbefore the ink gets dry, however, this financially-driven deal becomes human driven, full of emotions, trauma, and often irrational world of human beings in the midst of change.

Such success is by no means assured. To the contrary, majority of them fall short of their stated goals and objectives; one of the major reasons behind it is failing to consider culture. High-profile deals that supposedly failed due to corporate culture clashes include Daimler-Chrysler, Citicorp-Travelers, and HP-Compaq and Sprint-Nextel, transactions that ended up destroying billions of dollars in shareholder value.

What is noted first, are differences in the ways the companies do business--maybe

 ISBN: 978-81-910118-7-6

their relative emphasis on production versus marketing, or their predominantly financial versus technical orientation. Then differences in how the companies are organized, the structure, their centralization versus decentralization or their different styles of management and control, are recognized. Finally, people attribute these differences to competing values and philosophies, with their company seen as superior and the other as backward, bureaucratic, or just plain bad.

The opportunity to proactively build a shared culture remains one of the great benefits of joining forces in a merger. Of course, the work of building a desired culture is difficult--it requires breaking down old norms, articulating new ones, convincing people, why the new way is superior to the status quo, being patient as employees experiment with bringing their on-the-job behaviors in line with espoused cultural norms, and reinforcing the new ways through rewards and recognition.

Objective of Study:

The main objective of the present paper is to examine impact of culture on Merger and Acquisitions, challenges faced and managing the culture for opportunities.

Literature Review:

What is Organization Culture?

The organization culture describes the personality of the organization – its overall orientation, its unwritten codes and norms, implicitly understood ways of relating and interacting among the employees; values that are shared and practiced by employees.

"Organizational culture may be thought as glue that holds the organization together, through a sharing of pattern of meanings"(Kramer1974 and Foy 1974)"The culture focuses on the values, beliefs, norms and expectations that members come to share". (Beyer & Trice 1987; Tunstall 1983; Wilkins & Patterson 1985; Martin 1985; Barney 1986; Kerr 1991)

Another often referred-to definition of organizational culture was devised by Schein (1989, 1992). According to Schein (1989), "culture is a coherent system of assumptions and basicvalues, which distinguish one group or organization from another and orient its choices."

These cultural influences are critical to the performance of an organization in as much as other tangible factors like environment, strategy & technology etc. So when we talk about the two organizations going to merge it becomes most critical and important.

The strength and influence of any organization's culture depends upon how intensely and universally its core values, beliefs and assumptions are shared and practiced by its employees. Organizational culture is nothing but strong, coordinated efforts for achieving the goals. On the background of merger and acquisition managing culture becomes foremost important for M & A to succeed.

Culture is a critical determinant of organizational effectiveness, it is essential

for the leaders to understand the critical aspects of managing and changing the organizational culture.

Merger and Acquisitions:

When we use the term "merger", we are referring to the merging of two companies where one new company will continue to exist.The term "acquisition" refers to the acquisition of assets by one company from another company.

A merger occurs when one company is combined with and totally absorbs another. Operations, facilities, and functions are rationalized and combined for maximum efficiency. The cultural beliefs, norms, and infrastructure of the acquired organization generally change to the acquiring culture for the integration purposes. The acquired organization effectively loses its identity. Acquisition is a process used to transfer stocks or assets from one company to another (from seller to buyer). The process of acquisition can take place as a purchase of stock, purchase of assets, or a merger. Acquisition is a generic term used to communicate the transfer of ownership. A merger may or may not be a part of an acquisition. One can do an acquisition followed by a merger or by means of a merger, or one can also do an acquisition where no merger takes place.

It is the mergers and acquisitions that have the greatest implications for size of investment, control, integration requirements, pains of separation, and people management issues (Doz and Hamel, 1998; Hamel, 1991; Harbison, 1996; Sparks, 1998, 1999). Some authors consider cultural fit as even more important than strategic fit (Cartwright &Cooper, 1993; Chatterjee et al.1992; Weber, 1996; Weber, et al., 1996)"Cultural fit", i.e. compatibility of national and organizational cultures, in M&As and its crucial role regarding M&A success has come beyond doubt. (Cartwright & Cooper, 1993; Chatterjee et al., 1992;Child et al.; 2001; Datta, 1991; Fink & Holden, 2007; Hurt & Hurt, 2005; Larsson &Lubatkin, 2001;Olie, 1994; Teerikangas& Very, 2006; Weber, 1996; Weber, et al., 1996; etc.)Grant (56) says, 'cultural change cannot happen at the flick of a switch… and… change cannot happen without some form of disruption'. Halligan (57) agrees that, 'there is no more difficult task than that of changing people's behavior'. Davies et al (31) advise that 'the scale and the scope of the task… (For cultural change)… is substantial.'

Research Methodology:

This study is purely based on secondary data, collected by reviewing various literatures available through journal articles, books, magazines, reports etc. All the data gathered through these sources is analyzed, keeping in view the objective of the study and important findings are highlighted.

Analysis and Findings:

Culture - Challenge in M & A:

The major, most difficult area to face and understand in a merger is the issue about culture.When we talk about merger & acquisition, where more than one organizations are involved having

 ISBN: 978-81-910118-7-6

different cultures. So onecan't avoid culture clashes, but can minimize them as much as possible.Finally, awareness, anticipation, acknowledgment and appropriate management of cultural differences can reduce problems deriving form cultural diversity (Duncan &Mtar, 2006; Zaheer et al., 2003).

When two companies merge, the assumptions are often made that they should take the leading attributes of each company's culture and integrate them. But this depends on the purpose of the merger and acquisition. Corporate strengths, however, are sometimes incompatible, such as when a more mature company acquires a start-up as a way to add products to their portfolio. In such integration, choices to act should focus on the relationship between cultural assumptions and business results then focus only those cultural issues that are critical to the business.Cultural differences may include how the two organizations define and measure success within the organization; benefits employees enjoy, such as personal time and insurance; how problems within the organization are handled; the management styles of the two organizations; and the overall attitude of the employees and managers toward business functions and the industry in which they work.

Organizational culture, by its nature, is incredibly difficult to change. The cultural integration at a human level is critical to M&A success.

Employees don't regularly notice their corporate culture, but when thrust into a merger, employees become aware of how their ways of doing things differ from those of the other side. They see themselves on the weaker side – employees not only see differences but also feel a sense of vulnerability over losing their accustomed way of doing business.In Many cases M & A results into layoffs or employees leaving the companies, "Their first concern for employees is usually the security of their jobs and how their family and income will be affected. Second, they want to know if their life is going to change. Are there going to be new demands? Are the expectations going to change? Are they going to have the same boss?""It is very difficult to integrate two different accounting systems pretty easily; but it's not as hard as understanding a new boss. People are more difficult to understand than systems."

No matter how strong a company's strategy, any newly merged organization – whether it is the acquirer or the acquired company – will be impacted by pervasive fear and uncertainty.The best approach is to devote time and resources to deep culture learning, especially during the combination phase.When properly managed, cultural clash can result in a post-merger organization that can better achieve strategic and financial objectives than either partner could do on its own. Organizations learn from one another and constructively decide regarding what cultural characteristics best align with the combination's objectives.

A way out – Managing the culture

This challenge can be overcome if leaders address culture at a basic level. If there is a principle of accountability

andis expressed through the local culture, employees can make sense of it in their own context. Through disciplined integration process, merger and acquisitions can meet and even exceed pre-deal expectations.

Pre-merger preparations:

Pre-planning can help increase chances for success.The organizations/management should make the difficult decisions proper between the two cultures to minimize clashes, protecting crucial elements for future success and defining a roadmap for culture change to support future strategic objectives.They should really evaluate and study the employees and see how those organizations and cultures were working, as well as assessing to see how [that] will fit into the new group that is going to be formed, because human resources help determine if the cultures of the two companies that are becoming one through a merger or acquisition are compatible. Human resources must have a firm grasp on the culture of the company for which they work and must study the culture of the other organization to make such a determination.

Enacting cultural Shock:

- Cultural analysis with Cultural audit is nothing but knowing the strength of each organization's culture and the degree of differences between the organization's key characteristics. Consequently, cultural assessments, as an element of soft due diligence, are also becoming common (Numerof and Abrams, 1998). This is carried out in following steps:
  - Assessment of Current Cultures
  - Comparing present cultures to identify similarities and differences across organizations,
  - Gap evaluation - assessment to see how [that] will fit into the new group (expected culture) that is going to be formed
- Implementation - This is tackled with help of unfreezing (leaving away old habits and patterns of thinking), change (align with the new values, ways) and refreeze (settling with new values and ways) with the help of leadership.

Cultural integration:

In general, integration is the process by which two companies combine after a merger or an acquisition is announced and pre-merger activities are completed. Ideally there are interaction and adaptation between two cultures, which result in the evolvement of a new culture which represents best of each culture.

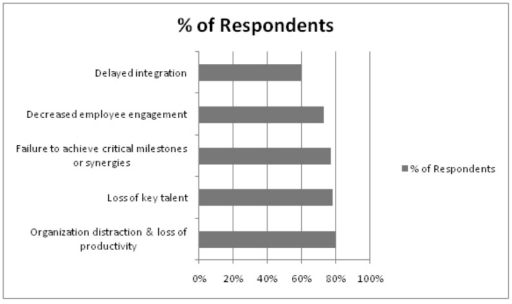
Cultural integration is a major barrier to success in a merger because every organization has its own unique business culture. M&A failures are often due to problems in integrating the different cultures and workforces of the combining firms (Marks and Mirvis, 2001; Schweiger and Walsh, 1990; Shrivastava, 1986). Some companies have a culture of paternalism while others are more democratic and participative. Bringing two different business cultures together in any transaction can create frictions. The steps an organization

 ISBN: 978-81-910118-7-6

can take to help reduce the potentially negative impact of culture differences are; anticipating cultural challenges, seeking guidance on cultural issues, understanding existence of cultural differences and finally coming up with a strategy for overcoming cultural conflicts as stated in above steps.

Consequences of unsuccessful culture integration:

Unsuccessful cultural integration leads to many of the consequences which ultimately results in M & A failure. The chart given below reflects major consequences like organization distraction and loss of productivity, loss of key employees, failure to achieve critical milestones or synergies, employee disengagement and delay in integration.



Source: Global Survey Findings

As reflected in the above chart, nearly 80% of respondents responded that unsuccessful cultural integration results into organization distraction and loss of productivity and according to 78%, it is because of loss of key talent.77% and 73% respondents said, it results into failure to achieve critical milestones or synergies and loss of key talent respectively. According to 60 %, the integration failure results into total M & A failure.

Facilitating the cultural change:

In this stage cultural drivers identified in culture assessment are addressed and action is taken accordingly at the organizational, program or individual level.

Culture is something which is shared and not imposed. Employee acceptance must be solicited through participation around the new values. “An organization that reinforces its core values is more likely to reach the kind of growth and success that nearly all businesses seek.” (Gallagher, 2003) Values which are simply imposed will not thrive. Values must be practicable and absorbable. So the focus should be on such culture and people issues which are critical to the success and failure of the M & A.

Post- Merger activities:

Organizations have to make sure about the employees’ acceptance and participation in stabilizing with new culture after M&A. This can be done through following ways:

- Regarding the work force as one consolidated family not as two separate entities.
- Encouraging the positive relationships across organization; through making it possible for employees to recognize and appreciate their counterparts then be it in different countries also.
- Through an employee engagement survey; building a solid foundation of trust with all employees; especially with the new ones.

- Organizingtraining programs for managers and employees to recognize differences between the company's expectations and how to harness the emotional stress and challenges of the merger&acquisition to maximize both their personal and organizational success.
- In case of brain drain, listening and respondingtotheneedsofsuchtalented group and retaining such top talent through the growth opportunities, rewards and sense of identity who will be influencers, motivator to other people as well.
- In case new things are going to be introduced then without wasting time first putting those in place to avoid any uncertainty.
- Managers can act as positive role models for the cultural values, the message must also get conveyed through the behavior the managers.
- Employees advocating and practicing new values must be identified supported and rewarded.
- The selection, placement and socialization systems must be redesigned to align with the new values.
- Communication is the simple solution to nearly all of the problems presented by the culture clash that can come with a merger or acquisition. Transparency and communication are especially important in retaining top talent within a company

Culture in Cross-Border Merger & Acquisitions:

Issues of cultural compatibility can be complex especially within cross-border merger &acquisitions where the values and practices of the combining organizations reflect the influences of both their respective corporate cultures and their national cultures. A survey of top managers in large European acquirers showed that 61% of them believed that cross border merger and acquisitions are riskier than domestic ones (Angwin&Savill, 1997). The international M & A are particularly difficult to integrate because they require "double layered acculturation"(Barkema et. al., 1996), whereby not only different corporate cultures, but also different national cultures have to be bridged.So a company involved in an international merger or acquisition needs to consider these differences right from the initial design stage if it is to succeed.

Benefits and Opportunities:

- Underlying Principle behind a good business decision of mergers and acquisitions is simple; by combining the two companies higher revenues, lower expenses and lower overall cost of capital will be realized than if the two companies would operate separately.
- A united and action orientated culture gives people a sense of positive direction which will be the need of that particular time.
- When a new culture is being built either through transformation or by selecting the best from both organizations,a tone

 ISBN: 978-81-910118-7-6

of cross-cultural consideration helps employees to open up to different ways of doing things rather than tightly hold on to their ways.

Limitations:

The Review resulted in a vast amount of available literature to analyze. Evaluation of this large scale information, in a limited time frame proved challenging. The limitations of the study suggest several prospects for further research. However, it is very difficult to evaluate the effects of culture on merger and acquisition in isolation due to the large number of factors influencing merger and acquisition and this study does not cover all the dimensions and aspects related to M & A.

Future Scope:

The cultural implications of M&A discussed in this study provide a rich field for further research, several important issues related to the this topic and post-merger culture issueslike the psychological, social issues, national, leadership etc. have been left unexplored.

Recommendations:

Give a high priority to organizational cultures also along with finance, strategic issues to increase the likelihood of a successful M & A.Informemployees as soon as possible about what to expect, once the M & A takes place. Management must continue to listen to and communicate with employees and relay accurate and comprehensive information throughout the process.

Conclusion:

In M&A emphasis is usually placed on financial goals while cultural and other implications do not receive much attention. The purpose of this study has been to delineate impact of culture on M & A and cultural processes inherent in M&A, and to discuss their implications.

After analyzing several literatures, showed that the cultural effects can have diverse impacts on M & A and its success. But it is difficult to evaluate the effects of culture on merger and acquisition in isolation, (stahl, chua, & Pablo, 2003) found a significant interaction effect between cultural distance and mode of takeover on acquired firm members' trust in the acquirer. These positive and negative impacts on M & A depends on nature and extent of cultural differences, the integration approach taken and the interventions chosen to manage these differences.

Successful M & Arequired greater cross-cultural understanding, smoother resolution of cultural differences, more communication and cooperation between two organizations, and greater commitment to the new organization.

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ISBN: 978-81-910118-7-6

Case study on Balaji Wafers - At the Crossroads

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Introduction:

The makers of 'Balaji Group' brand wafers and namkeen food products has deep faith in God & in good taste. Converting dreams into reality it leads them to the biggest potato wafers plant of India. The Balaji plant covers over 85,000 sq. m. area in the outskirts of Rajkot city. Its big taste revenue i.e. turnover touched to the crore rupees milestone. Balaji Group has 90% shares of wafers market and 70% shares of namkeen market in Gujarat. ChandubhaiVirani and his brothers started wafer business from a canteen of a cinema hall in Rajkot in 1974. Till 1989, wafers used to be made at Virani's house and distributed in and around Rajkot city. Today, deep rooted Balaji Wafers is giving international brands a run for their money, especially in Gujarat and Maharashtra markets. Balaji has already spread its wings in Goa and parts of Rajasthan and Madhya Pradesh also.

Started as micro business, today Balaji Wafers has evolved as aRs 800 crore company and giving tough competition to its close competitors such as Uncle Chips, Frito-Lay and other multinational food processing giants and holds a premier position in Gujarat and Maharashtra markets.

Balaji Wafers: A Success Story:

The story started in 1972, when Virani and his brothers Bhikhubhai, Kalubhai and Meghjibhai migrated from a small village Dham in Jamnagar district to Rajkot. PopatbhaiVirani, a farmer who sold ancestral agriculture land and gave Rs. 20,000 to his sons to venture into business. In 1974, three sons of a farmer in Dhundoraji migrated to the nearest urban centre, Rajkot. Armed with no more than a primary education and Rs 20,000 as initial capital from their father, the Virani brothers - Bhikhubhai, Chandubhai and Kanubhai - came to Rajkot in search of work. They had not much money, no references, and no prior experience of working in manufacturing industry. Bhikhubhai and Chandubhai began selling refreshments in Rajkot's Astron Cinema, and in 1976, the cinema owner Govindbhai handed over the canteen to them on a contract basis. Six years later, in 1982, the brothers decided to turn this into their core business and invested around Rs 20,000 in it.They began sourcing wafers from the only supplier in Rajkot, and also started selling toasted sandwiches made at home by their wives. Potato wafers, they noticed, constituted around 80 per cent of the refreshment sales, but the supplier was unable to meet the demand. This got them

 ISBN: 978-81-910118-7-6

thinking of ways to develop their business by inducting new technology.

In 1989 the company set up a plant in Aji, Gujarat Industrial Development Corporation's industrial estate in Rajkot, investing Rs 5 lakh. Since then the company has invested around Rs 500 crore in operations. The first year's revenue was around Rs 2.4 lakh.

Chandubhai and his brothers were quick to realise the importance of technology in scaling up. In 1995-96 the company installed its first semi-automatic plant with a capacity of 250 kg of potato chips per hour. By 1998-99 it was working at almost full capacity.

Viranis invested money given by their father in farm equipments business, but could not succeed and lost the money. "We were left with nothing," said ChandubhaiVirani, adding that the brothers struggled for a job at a canteen at the newly-inaugurated Astron cinema in Rajkot. In the lines of rapid pace: "We worked there at a modicum monthly salary of Rs 90 and Rs 150 respectively. But our desperation to survive was so high that we did not get into any disputes with the management and employees' union. It was this attitude that had won us the confidence of the cinema owners and they started revenue sharing with us for the canteen," Virani tells remembering the naming of the enterprise, Balaji, which was given after an idol of Hanuman placed in the canteen.

Soon the business grew bigger.

Later on, Virani purchased a house in Rajkot, where wafer and other food products were produced, mostly manually and transported to different locations of the city. "We grew with a rapid pace and started our first manufacturing plant on a 1000-sq-mt area at Aji-GIDC industrial estate in 1990. Since then the company has been registering phenomenal success in the food processing business", recalls Virani.

In 1992-93, the company procured semi-automatic matheral-blade chips making machine with a capacity to process 200 kg finished wafers per hour. "For the investment of Rs 50 lakh towards procurement of the plant and machinery, we had again obtained a loan from a bank.

But with growing requirements of the company, we needed higher capacities and bigger manufacturing area. So, in 2000, we acquired yet another plot of 3000 sqmt in the same industrial estate," said Virani.

The company installed a fully automatic plant with a capacity of 500 kg wafers per day. "Till 2000 we had followed manual packaging, but we understood the consumer preferences and hygiene priorities. Therefore, we deployed nitrogen packing facility with our fully automatic plant at Aji," he said. With the addition of new plant, the company's total wafer production reached 700 kg wafers per day.

Later, Balaji explored markets outside Gujarat and started marketing in adjoining states of Maharashtra, Rajasthan and Madhya Pradesh. "In 2003, we set up our distributors in Maharashtra. Sooner the demand from other states increased, so we spread our wings to Rajasthan and Madhya Pradesh," Virani said.

In order to cater Maharashtra and Goa market, Balaji started a plant at Valsad

in South Gujarat. Currently, the company enjoys premium position with respect to manufacturing capacities. Balaji'sValsad unit, which has a wafer manufacturing facility of 2,200 kg per hour, is one of the largest potato wafer-making units in Asia. The company had sourced the entire plant from China.

Demand still exceeded what they could produce, and in 1999 Balaji Wafers installed Gujarat's first fully automated potato chips plant, following it up with another in 2003-04 in Vajdi district with a capacity of 1,200 kg per hour. Sales continued to grow and, between 2000 and 2006, Balaji captured a 90 per cent share of the potato chips market in Gujarat, and a 70 per cent share of the namkeen category. Besides, its markets in Maharashtra and Rajasthan were also growing.

Thus encouraged, they set up yet another plant in Valsad in 2008 with a processing capacity of 8,000 kg of potatoes per hour, producing 2,000 kg of potato chips per hour. The company now has a capacity to process around 450,000 kg of potatoes per day and 400,000 kg of namkeen per day. It generates direct and indirect employment for 250,000 people.

Competition at Balaji:

What was founded with a capital of Rs 20,000 in 1982 by two brothers who came to Rajkot from a remote village in Jamnagar district has grown into an empire with revenues of Rs 1,200 crore. Multinationals like Pepsico and Kellogg India are reported to have shown interest in picking up a stake in the Rajkot-based wafers and 'namkeen'giany.

ChandubhaiVirani, "We never started the business with the aim of making money. We wanted to do something good and meaningful. Today, when we pass on our venture to the next generation, we would like them to continue the business with the same discipline."

Top snacks maker PepsiCo Foods has started slipping with a slew of smaller and regional brands eating into the market share of its flagship brands Kurkure snacks and Lays potato chips.

Kurkure and Lays, which dominate the Rs 9,400-crore Indian snacks market, have begun losing share to regional players such as Gujarat-based Balaji, Indore's Yellow Diamond and DFM Foods' Crax in addition to some variants of ITC's Bingo snacks, which are matching the multinational on pricing, variants and regionalisation.

Industry official quoting Nielsen data said both Kurkure and Lays' market shares slipped 2-3% in the April-September period, while some others like ITC's Bingo, Balaji, Parle and even Yellow Diamond have gained. Nielsen data also shows that PepsiCo Foods' (FritoLay India) share in overall western snacks has slipped to 40% last fiscal from 48% in 2009-10.

A PepsiCo spokesperson said the company doesn't comment on market shares, which "fluctuate from quarter to quarter".

"This year we have further strengthened our market position in all potato chips, Kurkure, baked snacks and traditional namkeen that we operate in, with more than 25 new launches including new category introductions like Kurkure Monster Paws and KurkurePuffcorn," the person said.

 ISBN: 978-81-910118-7-6

Officials said the firm is banking on volumes, multiple packs and increased marketing spends to get back its market share. But then its smaller rivals too are widening their product portfolio and reach.

DFM Foods, maker of Crax snacks, for example, stepped up its distribution in North India and launched Crax in the western markets last summer. "This has helped in our brand share going up," MohitSatyanand, independent director at DFM Foods, said.

The salted snacks market in the country has been growing 25% a year, and smaller players have been fuelling category growth as much as bigger ones like PepsiCo, ITC and Haldiram's.

And they are attracting the attention of private equity players. Mid last year, Sequoia Capital invested close to $30 million in Indore-based snack food maker Prakash Snacks, owner of Yellow Diamond chips. The eight-year-old Indore-based firm sells a range of chips and savoury puffs.

PepsiCo has been selling products at prices ranging from Rs 2 to Rs 55 across categories. Last year, it consolidated its mass-priced snacks under a new entity, Lehar Foods, to take on regional brands such as Balaji, Bikanervala and A-Top Foods.

It operates on a low-cost model and PepsiCo is hopeful that Lehar Foods will contribute 50% to the firm's foods division FritoLay by 2015. A couple of years back, PepsiCo attempted to buy out strong regional players such as Gujarat-based Balaji Wafers and A-Top Foods, but the talks did not materialise.

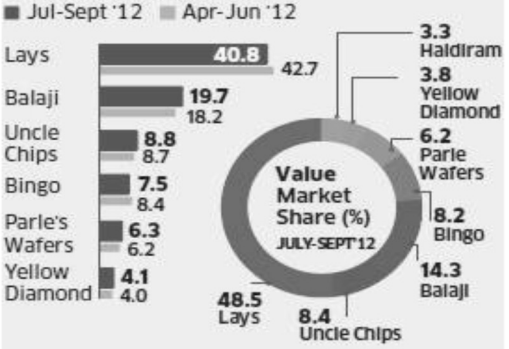
Meanwhile, the competition is increasing. Biscuits and snacks maker Parle Products extended its portfolio to the traditional salted snacks category with the revamp of its 'Parle namkeens' earlier this month.

"Whenever new products enter any category, the dominant player naturally gets impacted," B Krishna Rao, group product manager at Parle Products, said. He said the company was enthused by the product's initial response and hoped to capture 20% share by the end of this fiscal.

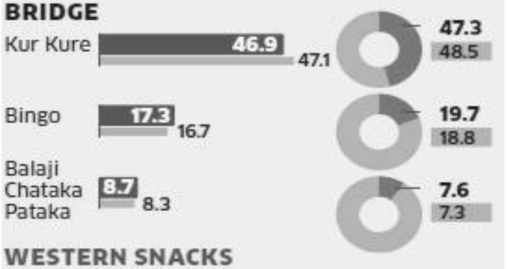
Chip on the Shoulder

WAFERS

Volume Market Share (%)



BRIDGE



WESTERN SNACKS

Market Share (%)

	2011-12	2010-11	2009-10
FritoLay India	40	43	48
Haldiram	5	6	6
Balaji Namkeen	11	13	13
ITC	9	8	8
Parle Products	5	3	3
Total Market (₹ Cr)	241,124	205,591	138,791

Figures are for July-June

Strategies at Balaji:

This simple mantra rocked and changed the definition of chip world. Winning the heart by quality and great taste and distributing sufficient dealer margin is a winning strategy of Balaji Group. Its 'Value for money' strategy enables even a kid to buy fresh & healthy food in small prices. Indeed in a neck to neck competition ear one must implement new ideas and balaji group has developed the think tank who continuously update strategy in the right direction. Think win-win & Stay ahead with us

Exports at Balaji:

India exported balaji wafers worth USD 32,255 with total quantity of 9,738. United Arab Emirates is the largest buyer of balaji wafers accounting for exports worth USD 25,926 followed by United States and Australia which imported balaji wafers worth USD 4,905 and USD 631 respectively. Mundra accounted for 49% of exports followed by Kandla and NhavaSheva Sea which account for 25.2% and 16.6% of exports respectively.

Future Plans:

Balaji Group perceive in growth rather say development to touch the sky. The company will enhance its product range by adding some futuristic and Indian traditional taste company will plan to some extruded snacks and western products to their Global market. Recently company has acquired more space where its entire namkeen unit will be shifed. The future will see more of BhikubhaiVirani as a Chairman, Mr. Chandubhai as a Managing Director, Mr. KanubhaiVirani as a Technical Director & Mr. KeyurVirani as a R&D Director. At Balaji progress is a life line.

Balaji Wafers at the Cross Road:In a sentimental outpouring reminiscent of the generational divide among the promoters of Bajaj Auto over choices for its two-wheeler business, ChanduVirani, the man who led the charge to build Balaji Wafers into a Rs 1,000-crore snacks brand, has expressed reservations on the plans of the next generation of his family to bring in an external investor and a professional management.

"It is my old-fashioned view. I am not convinced yet that any multinational will take care of the Balaji brand the way we do," the 56-year-old Mr Virani said, two days after Bloomberg news report that PepsiCo, the world's largest snack-food company, was among the suitors for the Rajkot-based company. Earlier this month, Balaji confirmed it had appointed advisory services firm EY to raise "growth capital investment" and was in talks with PE investors. According to Mr Virani, founder and managing director of Balaji, the decision to hire EY was that of his two nephews and son, who took charge of the business between 2000 and 2006. "The company is in a good place today and I am not sure there is a need to scale up," he says. "Yet, I will not oppose the plan if it goes ahead. Maybe I am completely wrong." Public airing of a difference of opinion between generations, in cordial circumstances, is a rarity in family-run Indian businesses. The best-known instance in recent years is that of Rahul Bajaj, the patriarch of Bajaj Auto, disagreeing with his son, Rajiv, on creating independent brands (like Boxer and Pulsar)

 ISBN: 978-81-910118-7-6

and driving out of the scooters business. "I feel bad, I feel hurt," Rahul Bajaj said in a 2009 television interview to NDTV on exiting the scooters business that symbolised much more than a two-wheeler and gave the iconic tagline, Hamara Bajaj. To which, Rajiv, seated next to him, responded: "I care less for a solution from emotions, I believe more in the magic of logic." A similar difference – between holding on to a hoary past and letting go to create a new future – hangs over current conversations at Balaji Wafers. "Balaji is my life today," says Mr Virani, who is staunchly opposed to selling the business. According to KeyurVirani, his nephew who is currently in charge of the business and is reportedly leading the investor negotiations, the family prefers PE investors as they will bring in a professional management. "Growth is important. We also need to look outside and have a sense of how the global market is evolving," he says. "But it is not that we are handing over charge to someone else. We will be involved in running the business." Last week, Reuters reported that Balaji was talking to PE funds, including Blackstone Group and Actis, to raise $100-125 million (Rs 650-750 crore). Terming it a "practical decision", Keyur says: "Ultimately, a brand has to grow, and that may prove to be its downfall. But, at the same time, we will abide by Chandubhai's view about not chasing growth so blindly that we are unable to handle it well or sustain it."

According to Rajiv Bajaj, MD of Bajaj Auto, in a family business, 20% weightage should go to the family and 80% to the business. "If we strive to ensure the business is doing well, the familywill invariably be happy," he said. "But if, instead, we seek to ensure that the family is happy, it's no guarantee that the business will do well." In a rapidly evolving market, he adds, each generation needs to adapt itself to circumstances that differ significantly from those faced by their predecessors. Family-business consultant RajuSwamy says Balaji Wafers has to focus on growth for the family's sake. "If there is work in the family business for only three and there are six more, it leads to conflicts," says Swamy, founder of Promag Consulting. "A small business may not be able to accommodate all of them. What the next generation is therefore seeking is natural." Balaji was set up in 1992 by Chandu and his three brothers: Meghji, Bhiku and Kanu. But its seeds were sown between 1974 and 1982, when the brothers supplied potato wafers and namkeens to Astron cinema hall a school in Rajkot. In 1982, they started making potato wafers at their house in the same city. In 1992, they set up an automated production unit and started Balaji Wafers, named after a family deity, Bal Hanuman. The next generation started joining the business after 2000. Today, besides Keyur (33), who is the son of Bhiku, there is Mihir (29, also the son of Bhiku) and Pranay (29, son of Chandu). While these three focus on marketing, expansion and R&D, Virani spends a few hours every day visiting plants, talking to suppliers and dealers, and checking product quality. According to Mr Virani, Balaji Wafers currently has an annual turnover of about Rs 1,000 crore. The company's products – wafers and namkeens – are priced about 40% below established national brands. Its presence is mostly in Gujarat, MP, Rajasthan,

Maharashtra and Goa, where it is estimated to have a 65% share of the organised market. "Balaji Wafers enjoys great brand equity due to three factors: affordability, availability and consumer focus," says JagdeepKapoor chairman of Samsika Marketing Consultants. "It has transcended a difficult category in foods, competing with PepsiCo's Lays and ITC's Bingo.

It has evolved bottom up and has tremendous scope to grow." Mr Kapoor feels the company will be challenged while scaling up, and going from local to regional to national. "They have to grow state by state, in phases," he says. "It is better to be a regional king than a national beggar." Mr Virani professes to a dim understanding of the modern way of deal-making. "I am not bothered with investment decisions or making money," he says. "Stock market listing, etc., is all paper wealth. How one grows from the roots by taking everybody along is true success." His big concern is that Balaji's partners – dealers, retailers and suppliers – may be affected if a new investor comes in. Mr Virani talks of the close ties with this set. Rajiv Bajaj feels that if the older generation gives way to the younger, a middle path is the best. "The older generation must provide the younger lot with a meaningful opportunity; and the younger generation must earn their position through performance." "Ultimately, both must acknowledge that free markets value meritocracy, not aristocracy."

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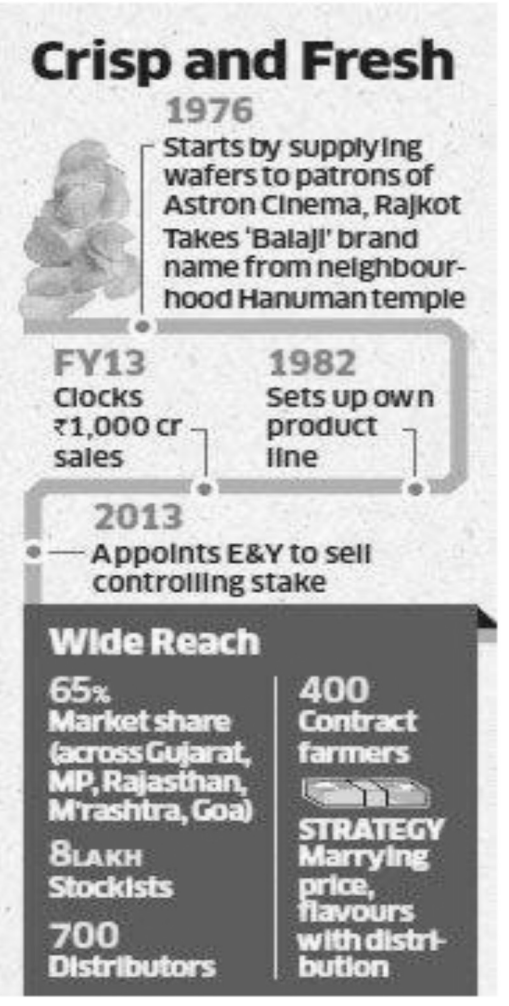
Annexures:

AnnexureI-BalajiAt a Glance:



 ISBN: 978-81-910118-7-6

Annexure II

Exports Details of Balaji:

Date	HS Code	Description	Destination	Port of Loading	Unit	Quantity	Value (INR)	Per Unit (INR)
30-Dec-2013	19053219	BALAJI WAFERS NAMKEENS : POTATO WAFERS (SALTED), (AS PER INVOICE)	United Arab Emirates	Mundra	CTN	45	33,844	752
30-Dec-2013	19053219	BALAJI WAFERS NAMKEENS : POTATO WAFERS (MASALA), (AS PER INVOICE)	United Arab Emirates	Mundra	CTN	80	60,167	752
30-Dec-2013	19059090	BALAJI WAFERS NAMKEENS : FARALI CHEVDA (AS PER INVOICE)	United Arab Emirates	Mundra	CTN	1,575	194,985	124
30-Dec-2013	19059090	BALAJI WAFERS NAMKEENS : CHANADAL (AS PER INVOICE)	United Arab Emirates	Mundra	CTN	375	40,622	108
30-Dec-2013	19059090	BALAJI WAFERS NAMKEENS : MUNGDAL (AS PERINVOICE)	United Arab Emirates	Mundra	CTN	375	55,710	149
30-Dec-2013	19059090	BALAJI WAFERS NAMKEENS : TIKHA MITHA MIX(AS PER INVOICE)	United Arab Emirates	Mundra	CTN	70	32,498	464
30-Dec-2013	19059090	BALAJI WAFERS NAMKEENS : RATLAMI SEV (ASPER INVOICE)	United Arab Emirates	Mundra	CTN	40	18,570	464
22-Nov-2013	19053290	POTATO WAFERS (BALAJI TOMATO WAFERS 150GMS.) 012PCS/CTN (BENEFIT AS ADMISSIBLE UNDER CHAPTER 3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	45	14,110	314
22-Nov-2013	19053290	POTATO WAFERS (BALAJI MAGIC MASALA 170GMS.) 012PCS/CTN (BENEFIT AS ADMISSIBLE UNDER CHAPTER 3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	45	14,110	314
25-Oct-2013	19053290	POTATO WAFERS (BALAJI TOMATO WAFERS 150GMS.)012PCS/CTN (WE SHALL CLAIM THE BENEFIT AS ADMISSIBLE UND.CHAP.3 OF FTP)AS IN	United States	Sabarmati ICD	CTN	25	7,956	318

25-Oct-2013	19053290	POTATO WAFERS (BALAJI MAGIC MASALA 170GMS.) 012PCS/CTN (WE SHALL CLAIM THE BENEFIT AS ADMI.UND.CHAPTER 3 OF FTP)AS INV.	United States	Sabarmati ICD	CTN	25	7,956	318
4-Oct-2013	19053290	POTATO WAFERS (BALAJI WAFERS 150GMS.) 012PCS/ CTN. (BENE.AS ADMISSI. UND.CHAPT.3 OF FTP) AS PER INV.	United States	Sabarmati ICD	CTN	25	7,922	317
4-Oct-2013	19053290	POTATO WAFERS (BALAJI WAFERS 170GMS.) 012PCS/ CTN. (BENE.AS ADMISSI. UND.CHAPT.3 OF FTP) AS PER INV.	United States	Sabarmati ICD	CTN	25	7,922	317
21-Sep-2013	19053290	POTATO WAFERS (BALAJI WAFERS 150GMS.) 012PCS/ CTN.(WE SHALL CLAIM THE BENEFIT ASADMI.UNDER CHAPTER 3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	25	8,002	320
21-Sep-2013	19053290	POTATO WAFERS (BALAJI WAFERS 170GMS.) 012PCS/ CTN.(WE SHALL CLAIM THE BENEFIT ASADMI.UNDER CHAPTER 3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	25	8,002	320
17-Sep-2013	19059090	BALAJI WAFERS 50 GRM X 96	Australia	Sabarmati ICD	PCS	192	3,283	17
7-Sep-2013	19053290	POTATO WAFERS (BALAJI WAFERS 150GMS.) 012PCS/ CTN. (BENE.AS ADMISSI. UND.CHAPT.3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	15	4,967	331
7-Sep-2013	19053290	POTATO WAFERS (BALAJI WAFERS 170GMS.) 012PCS/ CTN. (BENE.AS ADMISSI. UND.CHAPT.3 OF FTP) AS INV.	United States	Sabarmati ICD	CTN	15	4,967	331
23-Aug-2013	19053290	POTATO WAFERS (BALAJI WAFERS 170GMS.) 012PCS/ CTN (BENE.AS ADMISSI. UND.CHAPT.3 OFFTP) AS INV.	United States	Sabarmati ICD	CTN	30	9,957	332

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20-Aug-2013	19054000	BALAJI PLAIN SALTED WAFER (PACKING IN60 GM)	New Zealand	NhavaSheva Sea	PAC	500	5,449	11
19-Aug-2013	19059090	WAFER(SIMPLY SALTEED,MAGIC MASALA,TOMATO MASTI,BALAJI TOMATO MASTI,BALAJI SIMPLY SALTED,BALAJI MAGIC MASALA,BALAJI CREA	United States	Mundra	CTN	31	19,401	626
4-Jun-2013	19042000	ASSORTED BALAJI WAFERS	Australia	Baroda	CTN	11	5,263	478
24-May-2013	19053290	POTATO WAFERS (BALAJI 170GMS.) 012PCS/CTN AS PER INV.	United States	Sabarmati ICD	CTN	50	17,664	353
10-May-2013	19053290	FOOD STUFF POTATO WAFERS (BALAJI 170GMS.) 012PCS/CTN AS PER INV.	United States	Sabarmati ICD	CTN	60	19,332	322
26-Apr-2013	19053290	BALAJI WAFERS 170GMS. 012PCS/CTN AS PERINV.	United States	Sabarmati ICD	CTN	30	9,751	325
26-Apr-2013	19059090	BALAJI WAFER(MASALA, TOMATO & KURKURE) = 30BOX(BENIFITS UNDR CHAP-3 OF FTP)	Australia	Mundra	BOX	30	17,933	598
13-Mar-2013	20052000	FOOD STUFF: BALAJI MASALA MAGIC WAFER 170 GMS (SHIPPER SAHLL CLAIM THE BENEFITUNDER CHAPTER 3 OF FTP)	United States	Sabarmati ICD	CTN	25	8,018	321
13-Mar-2013	20052000	FOOD STUFF: BALAJI TOMATO MASTI WAFER 170 GMS (SHIPPER SAHLL CLAIM THE BENEFITUNDER CHAPTER 3 OF FTP)	United States	Sabarmati ICD	CTN	25	8,018	321
1-Mar-2013	19011090	BALAJI WAFER	Madagascar	Mundra	KGS	200	12,296	61
3-Jan-2013	19059090	BALAJI WAFERS NAMKEENS: BALAJI NAMKEENS: FARALI CHEVDA SIZE: WT.PER PACKET IN GRAMS:180,PACKET: 5625 (AS PER INVOICE)	United Arab Emirates	Kandla	CTN	1,125	145,388	129

Annexure III

Product Mix:

ISBN: 978-81-910118-7-6

Global Strategies for Indian Automobile Component Manufacturers w.r.t. Thailand Market

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Abstract:

Globalization is the driving force behind every business move around the world. Every company's target is to increase its revenue through more and more exports. Indian Automobile Industry poised for major growth phase. Despite challenges, the Industry catching up fast with global trends and standards - both on technology and quality processes. Due to this is huge potential for exports of Indian Automotive component.

However at the same time it is not easy to enter in overseas market. One needs to study culture, background, business environment, potential, different government policies, various trade agreements and also the competition.

The purpose of this paper is to study Thailand market & suggest suitable strategies for Indian Automobile component manufacturers to take an entry in Thailand market.

Researcher paid a visit to this market & with help of Personal Interviews of various OEM's, Component manufacturers, Dealers & end users tried to collect primary data to understand overall market, market potential, perception, hurdles & opportunities. Also visited Exhibition to get more idea about market. In addition to that with help of secondary data researcher tried to collect info regarding Thailand economical situation, automobile market & various trade policies between India & Thailand.

After this survey & data collection, researcher suggested some of the strategies to take an entry in Thailand market & same model can be applied for other countries as well.

Introduction and Necessity of Study:

Globalize business environment and changing government policies around the world has led to global market integration to some extent. With changing business environment companies are fast adopting to take advantage of it. The global companies are changing their sourcing and selling strategy to keep competitive advantage over other companies. The companies are concerned about cost to maintain their competitive advantage over others. Countries like China, India, Indonesia, Philippines, Brazil etc have become preferred locations for outsourcing different functions of business. Among those countries China and India are considered as manufacturing hub of the world. Governments, Businesses and trade associations in these countries have taken notice of this trend and planning accordingly.

Today's economic environment especially appreciation of USD has presented an opportunity to India for Exports, this

 ISBN: 978-81-910118-7-6

may not remain for longer time hence to capitalise on this opportunity should be a top priority. In addition to this Trade Deficit is more concern for India. India is poor in oil resources and is currently heavily dependent on coal and foreign oil imports for its energy needs.

"*The growing trade deficit, which is the highest in the history of India's trade, is a cause for concern,*" said Rafeeque Ahmed, president of the Federation of Indian Export Organisation.

Indian auto component Industry is well positioned to grow at 14% CAGR (Compound Annual Growth rate) and will reach US $ 66 bn by 2016. Indian Auto Industry likely to retain Low cost advantage for a sizeable period.

Indian Auto-component industry at a glance

Year	2007-08	2008-09	2009-10	2010-11	2015-16 (Projected)
Turnover (USD Bn)	26.5	23	30.1	40	66
CAGR	14.6%	11%			
Exports (USD Bn)	3.8	4.0	3.4	8.2	12.3
CAGR	11%	18%			
Imports (USD Bn)	6.2	6.8	6.5	8.5	17.5
CAGR	11%	15%			

Source: ACMA (Automotive Component Manufacturers Association)

There are attractive collaboration opportunities between Indian Auto industry and auto component manufacturing industry with global OEMs and the Supply Chain majors. Apart from OEM supply the aftermarket opportunity is also very large. By 2015 the global auto component market will be around $1650 bn as per McKinsey and ACMA study. Out of this global market 26% or $425bn worth components are developed in-house by OEMs or sourced locally. Again 32% or $525bn worth components are sourced locally because of the marginal cost saving and difficulty in offshore sourcing. But 42% or $700bn worth of auto components can be sourced from offshore, this is potential market for auto component companies around the world. Hence this $700bn market available for auto components companies. Out of this potential market if Indian companies have 10% share of this market, the export market opportunity for the companies would be around $65bn to $70bn. Hence to exploit this potential companies are required to prepare international market plan accordingly.

Also OEMs and global aftermarket players have great opportunity to partner and use India's competitive advantages for sourcing and setting up collaborative operations. However in competitive environment especially cheaper products from countries like China, it is important to understand market perception for Indian product in various markets. This will help the component manufacturer to form strategically crucial international market entry as well long term strategy.

Statement of Problem

Many Indian companies have become Multinational companies and spreading their wings over the globe. As explained above there is huge potential for exports of Indian Automotive component. However

at the same time it is not easy to enter in overseas market. One needs to study culture, background, business environment, potential, different government policies, various trade agreements and also the competition.

In international markets choosing the potential country and right partner for business is important from long term perspective and for business development. Since market environment, business culture, legal systems etc are not familiar to anyone whosoever does business in other countries. It became important to understand Market for the product to decide appropriate strategy.

Researcher has chosen Automobile component market specifically as this market is growing fast as mentioned in Introduction and having good scope for exports in various countries due to technological and Qualitative advantage.

The researcher has chosen THAILAND because of present FTA (Free Trade Agreement) between India and ASEAN countries. Good opportunities are available for Indian component industry to explore business possibility with these ASEAN countries including Thailand.

Vehicle Production 2010

Country	Cars	Commercial Vehicles	Total	% Change
Indonesia	496,524	205,984	702,508	51.10%
Malaysia	522,568	45,147	567,715	16.00%
Thailand	554,387	1,090,126	1,644,513	64.60%
Vietnam	29,904	6,382	36,286	10.01%
Philippines	56,128	8,497	65,625	30.00%

Source:- OICA

If we go through vehicle production statistics as above, it is observed that Thailand, is one of the bigger & fast growing markets where vehicle production is higher than remaining countries. Researcher has chosen THAILAND for Study.

Objective of the Study:

- To understand Indian Automobile & component Industry . Thailand as country, & Automobile market in Thailand.
- Foreign Trade Policy of India & FTA with ASEAN Countries & Bi-lateral trades.
- Suggest suitable strategies to Automobile component manufacturers to enter in Thailand market.

Review of Previous Literature:

The Researcher has reviewed of following literature which is related to the research topic.

- Official Government sites of India & Thailand country will be reviewed to understand country profile, Geography, Population, economic indicators like GDP, inflation, currency etc.
- Review of Books on International Marketing and research Methodology.
- Review of the data available with local chamber of commerce regarding each country, present export to these countries and nature of export.
- Review of DGFT (Directorate General Foreign trade) sites, to understand present export incentive schemes

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and present agreements with these countries.

- Review of selected components manufacturer in each country and their sites to understand their location and their volume/sales.
- The researcher has reviewed sites ACMA, SIAM to understand Indian Automobile Market.
- Other global sites like Doing Business, OICA.
- Free Trade Agreement between India & ASEAN countries Issued by Govt of India

Scope and Limitation of Study

- Scope of the Study includes Major Dealers having presence on national level.
- Scope of study is limited to capital of Thailand i.e. Bangkok

Automobile market is divided in two parts OEM (Original Equipment Market) i.e. vehicle manufacturer and Aftermarket i.e. spare part and replacement market. Researcher has chosen both the segments for study, however more focus is on Spare market.

Reasearch Methodology:

Sample Size:

- Thailand – Capital of Thailand i.e. Bangkok
- 2/3 Sales Offices of major component manufacturer in Thailand.
- 4/5 major dealers in Thailand
- 1/2 Original Equipment Manufacturers.

Sampling Techniques:

To understand automobile market & then to formulate long term strategy especially in overseas market, researcher needs to collect specific data related to automobile components. To collect such data researcher needs to approach specific sources related to auto component market. To get correct & reliable data researcher has chosen purposive sampling technique for data collection.

Data Collection:

For the present Research Work data is collected through Primary and Secondary Source.

A. Primary Data will be collected directly through Interview & discussion with OEM, Component Manufacturers, Dealer & end user.

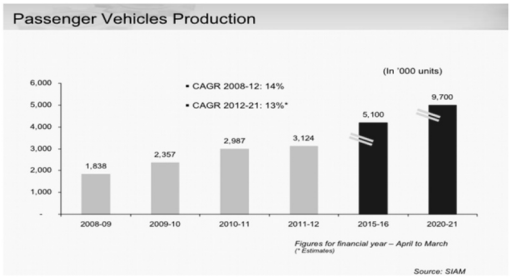
B. Secondary Data will be collected through various web sites.

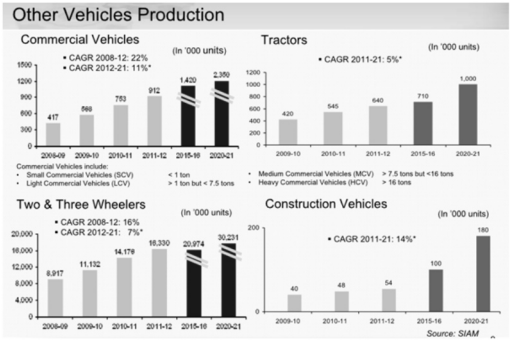
Indian Automobile & Component Industry

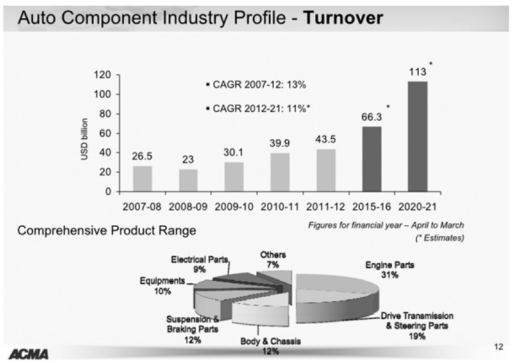
India: A Vibrant Economy:

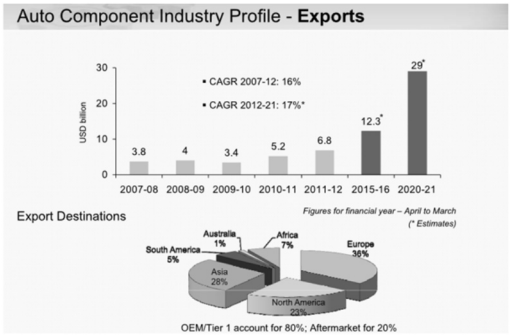
1. Largest Democracy – 1.2 billion people, Growing Middle Class
2. 4thlargest GDP (PPP) and 10thlargest GDP (Nominal, USD 1.8 trillion)
3. One of the fastest growing economies - Estimates for 2013-14: 5%
    - India’s average GDP growth rate: 7-8 % slightly dipped in last 2 years.
4. 3rd Largest Investor base in the World

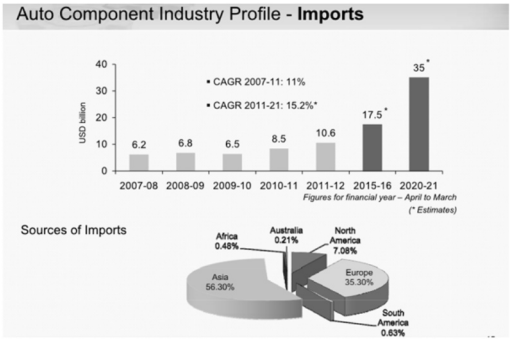
5. Robust Legal and Banking Infrastructure
6. Demographics Advantage – Youth driven economy
7. 2ndlargest pool of Certified Professionals and highest number of Qualified Engineers in the world
8. Investment in Infrastructure











Thailand: Economy & Automobile Industry:

- Capital city: Bangkok
- Surface area: 513,120 km2 (51st), 198,115 sq mi
- Population: 2011 estimate 66,720,153 (20th)
- Official language: Thai
- Currency: Baht
- GDP growth rate: 6.5% (2013 est.)
- Inflation rate: 3%
- GDP (Billion current PPP US$, 2012): $662.6 billion (2012 est.)
- Thailand's principle export destinations: China 11.7%, Japan 10.2%, US 9.9%,

 ISBN: 978-81-910118-7-6

Hong Kong 5.7%, Malaysia 5.4%, Indonesia 4.9%, Singapore 4.7%, Australia 4.3% .

- Thailand's principle import sources: Japan 20%, China 14.9%, UAE 6.3%, Malaysia 5.3%, US 5.3% .

Current Economic Situation:

Thailand is the second largest economy in the 10-nation ASEAN, second only to Indonesia. In 2011, Thailand's economic growth slowed to 0.1%, resulting from the severe flooding which began to hit the country in late July of 2011 and lasted for about six months. Real GDP contracted 9% year-on-year (YoY) in the fourth quarter of 2011, slashing the annual growth by 3.7 percentage points in 2011. These national-wise floods came at a time when the economy was already struggling from the disruptions of global electronics supply chain as a result of the 3-11 earthquakes in Japan.

Owing to the disruption in supply chains after Japan's disasters and Thailand's flooding, the growth rate of Thai exports slowed to 16% in 2011, down from 29% in 2010. Thai imports also grew at the slower pace of 25% in 2011, down from 37% in 2010.

Thailand is one of the world's most important electronics manufacturers. Major exports of Thailand include computers and parts, automobiles and parts, integrated circuits, and rubber; while its main imports included crude oil, industrial machines, chemicals and integrated circuits. The US, Japan and China are Thailand's main trading partners.

Trade Policy:

To meet its WTO commitments, Thailand has been reducing tariff rates and the number of items subject to import tariff. In January 2005, the government significantly cut import duties on a wide range of items: raw materials reduced from 7% to 1%, intermediate products from 12% to 5% and finished products to 10%.

Thailand is a member of ASEAN, which signed an agreement with China to set up a China-ASEAN Free Trade Area (CAFTA) in 2010. A concrete step towards establishing CAFTA came in November 2004, when China and ASEAN hammered out the Agreement on Trade in Goods (TIG) to remove tariffs on a range of agricultural and industrial products. The TIG agreement, which covered tariff-lines representing more than 95% of China-ASEAN trade, took effect from July 2005. The Trade in Services Agreement also came into force in July 2007. CAFTA took effect in January 2010, and over 90% of products traded between China and Thailand are now tariff-free.

In November 2007, the free trade agreement (FTA) between Thailand and Japan came into effect. This FTA allows 97% of Japanese exports to Thailand and 92% of Thailand's exports to Japan to be tariff-free within 10 years.

In addition, Thailand has FTAs with China, Australia, Laos, Peru and New Zealand. Beside, Thailand has embarked on

negotiations of FTAs with several economies, including the US, Korea, India, Pakistan, Chile and the EU.

Ranking based on various Parameters for Doing Business.

Parameter	Rank
Ease of Doing Business	18
Starting a Business	91
Dealing with constructing permits	14
Getting electricity	12
Registering Property	29
Getting Credit	73
Protecting Investors	12
Paying Taxes	70
Trading Across Borders	24
Enforcing Contracts	22
Resolving insolvency	58

Automobile industry in Thailand:

Supported by a hard-work ethic, steady investment and generous government incentives, Thailand's automotive industry is poised for accelerated growth. Currently employing more than 300,000 people and generating 12% of the national GDP, the auto industry is respected as one of the biggest manufacturing sectors in the country.

Thailand's industry has attracted virtually all of the world's major automakers, assemblers, and parts and component manufacturers, and many are planning further investment. Ford, General Motors, BMW, Daimler, Mitsubishi, Mazda, Toyota, Isuzu, Honda and Nissan all have an established presence in the country, together accounting for the lion's share of the nearly 1.4 million vehicles produced here in 2008. That is a far cry from when Thailand had just one automotive assembly plant in 1961.

Truly a global player, the Thai industry has expanded from its days as strictly an assembler into a major automotive production center. Automotive exports totaled 775,652 units in 2008. With shipments steaming to 130 countries, Thailand is currently the world's largest producer of one-ton pickup trucks and the seventh-largest automotive exporter overall. It is the top manufacturer in all of Southeast Asia, with measures in place for expansion.

The automotive industry in Thailand is looking to further growth and development. Such optimism stems largely from free-trade agreements (FTAs) with countries such as Japan, China, South Korea, Australia, New Zealand and India, and the prospect of rising exports to ASEAN member nations. As the industry contributes significantly to the local economy, the Thai government is also offering support in the form of tax incentives and various other measures, making Thailand fertile ground for investors.

There are many other reasons, hundreds in fact, why Thailand is an attractive base for automotive parts production. Of the more than 3,000 parts and components in a typical vehicle, many of them still have to be sourced from overseas. Opportunities exist for foreign suppliers to manufacture fuel injection pumps, transmissions, injection nozzles,

 ISBN: 978-81-910118-7-6

anti- lock braking systems, and central locking systems, among numerous other products. More R&D, design and testing centers are also needed, even though Yamaha, Bridgestone, Maxxis and Michelin already operate such facilities here.

Demand for Thailand-made automotive parts is growing. In response, there are already approximately 1,800 such suppliers in the country, of which about 700 are OEMs or original equipment manufacturers. Since all major Japanese

Automakers have opened manufacturing sites in Thailand, many of their parts manufacturers, such as France's Valeo, Germany's Bosch, U.S.-based TRW, Britan's GKN and Japan's Denso, Mitsuba and Mitsubishi have followed suit to serve their customers.

Thailand's exports of auto parts more than quadrupled between 2003 and 2008, as locally produced vehicles and components continue to gain global acceptance. The value of auto parts exported from Thailand exceeded US$4.6 billion in 2008, the fifth consecutive year of double-digit growth. Growth will continue as the government works to push Thailand into the top 10 of automotive producers.

Production statistics:

Year	Cars	Commercial vehicles	Total	% change
2009	313442	685936	999378	-28.3%
2010	564387	1090126	1644513	64.6%
2011	537587	919811	1457798	-11.4%
2012	945100	1484042	2429142	66.6%

Indian Foreign Trade Policy:

To cope up with the situation & enhanced exports, Government of India has drafted FOREIGN TRADE POLICY. Present foreign trade policy (Also known as EXIM Policy) is drafted for period 2009-14. The main objectives of these policy are:-

- To facilitate sustained growth in exports from India and import in India.
- To stimulate sustained economic growth by providing access to essential raw materials, intermediates, components, consumables and capital goods scheme required for augmenting production and providing services.
- To enhance the technological strength and efficiency of Industry Agriculture industry and services, thereby improving their competitive strength while generating new employment opportunities, and to encourage the attainment of internationally accepted standards of quality.
- To provide clients with high-quality goods and services at globally competitive rates. Canalization is an important feature of Exim Policy under which certain goods can be imported only by designated agencies. For an example, an item like gold, in bulk, can be imported only by specified banks like SBI and some foreign banks or designated agencies.

In addition to this to facilitate & enhance trade relations with specific countries India has signed various FREE TRADE AGREEMENTS (FTA's). Some of

the FTA's already signed with various countries.

To Understand advantages of Foreign Trade Policy of India we will take Case Study of " Bi-Lateral Trade between India & ASEAN Countries with special reference to Thailand."

India – Asean Countries & India - thailand Bilateral Trade

India has put an emphasis on enhancing trade relations with ASEAN countries in recent years. In the post-reform reform period, India's export to ASEAN has significantly increased. ASEAN-India dialogue relations have grown rapidly from a sectorial dialogue partnership in 1992 to a full dialogue partnership in December 1995. The relationship was further elevated with the convening of the ASEAN-India Summit in 2002 in Phnom Penh, Cambodia. The framework FTA has a built in "early harvest programme" which was started from November 1, 2004. In the third India-ASEAN Summit in Laos held in November, 2004. Finally ASEAN and India signed the ASEAN-India Trade in Goods (TIG) Agreement in Bangkok on 13 August 2009 after six years of negotiations. The signing of the ASEAN-India Trade in Goods Agreement paves the way for the creation of one of the world's largest free trade areas (FTA) - market of almost 1.8 billion people with a combined GDP of US$ 2.8 trillion.

India and ASEAN countries decided to set a target of $100 billion turnover for the bilateral trade by 2015. The major emphasize given on Economic Relation & Socio-cultural relationship.

INDIA'S MERCHANDISE TRADE WITH ASEAN
2000-2001 TO 2011-2012 (US$ BILLIONS)

Year	Export to ASEAN	Import from ASEAN	Trade Turnover	Balance
2000-01	2.91	4.15	7.06	-1.23
2001-02	3.46	4.39	7.85	-0.93
2002-03	4.62	5.15	9.77	-0.53
2003-04	5.82	7.43	13.25	-1.61
2004-05	8.43	9.11	17.54	-0.69
2005-06	10.41	10.89	21.30	-0.47
2006-07	12.61	18.11	30.72	-5.50
2007-08	16.41	22.68	39.09	-6.26
2008-09	19.14	26.20	45.34	-7.06
2009-10	18.11	25.80	43.91	-7.68
2010-11	25.63	30.61	56.24	-4.98
2011-12	36.74	42.53	79.27	-8.79

Source: Indian Ministry of Commerce & Industry

India – Thailand Bilateral Trade

India and Thailand have an excellent relationship in trade and business. Trade between India and Thailand is growing at an amazing rate. Diplomatic relations between India and Thailand were established in 1947, soon after India gained independence. India started a policy in 1993 which was named 'Look East Policy' and the same strategy was developed by Thailand too, which was named 'Look West Policy' in 1996. India's Look East Policy and Thailand's Look West Policy set the stage for a substantive consolidation of bilateral relations.

The two countries have also decided to increase the trade between each other from $6.7 billion in 2010 to its double in 2014. Major items of Thai exports to India include: machinery and machinery appliances; organic chemicals; electrical machinery and parts; rubbers; plastics; auto parts/accessories; fabrics; refrigerator compressors. Major items of Thai imports from India include: precious and semi-precious stones; machinery and

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machinery appliances; iron and steel; auto parts/accessories and medicinal and pharmaceutical products.

India has also inked a Free Trade Agreement (FTA) with Thailand for setting up of a free trade area covering goods, services and investment. The Indo-Thai FTA covers as many as 84 items and several areas in the first phase including services, investment, Economic cooperation & goods like food items, tourism, auto parts & electronics.

INDIA'S TRADE WITH THAILAND
(US$ MILLIONS)

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Export	1,810.87	1,938.31	1,740.16	2,274.21	2,961.01
Growth(%)	N/A	**7.04**	**-11.39**	**32.98**	**30.19**
Import	2,300.93	2,703.82	2,931.52	4,272.09	5,383.60
Growth(%)	N/A	**17.51**	**8.42**	**45.73**	**26.02**
Total Trade	4,111.8	4,642.13	4,671.86	6,546.30	8,344.61
Growth(%)	N/A	**12.89**	**.64**	**40.12**	**27.47**

Source: Government of India, Department of Commerce

Field Visit & Market Survey:

After conducting necessary secondary market survey/ research, researcher paid a visit to Thailand market to understand the market in more detail. To find out market potential & perception for Indian Automobile components researcher approached to following & conducted personal interview with respective people. Also researcher made a visit to Bust & Truck show.

Name of Company	
Persons contacted	Observations
11.1 Original Equipment Manufacturer	
ISUZU MOTORS	Isuzu is no.2 in HDT & MDT vehicles.
Mr. Wichien Jiravallop (Manager-Purchasing)	Producing around 7000 to 8000 vehicles per annum.
	Presently importing most of the parts from Japan (e.g. wheels from Topy).
Mr. Akkaradaj Tuntisuraparp (Engineer – Procurement)	Focus is for localization of products & sourcing from ASEAN countries. (E.g. 16" wheels are procured locally from CMWT (Kalawit earlier) & above 16" is planning to import wheels from Indonesian company-Palinda)
	The sourcing decision is all in Japan. However, the local team is involved for local development.
	If supplies from ASEAN countries, then they have certain advantage and hence they try to develop most of the parts locally or from ASEAN countries.

HINO MOTORS Mr. Yasuomi Inoue – Division Coordinator (Purchase Dept) Mr. Chanon Wongsirilert – Localisation Expansion Mr. Surin Sema – Localisation Expansion Group Manager	Hino is no.1 player in HDT & MDT vehicles and produce around 10000 vehicles per annum.
	Hino importing parts from Japan, however started importing some % from China (E.g. Wheels already importing from Topy Japan & now started imported from China Company name is Zhang Xing). They are bit concerned about the quality & delivery issues of Chinese Products.
	Duty for Japan if imported as CKD parts is 10%, Duty from China is 0% & Duty for Indian parts are 30%, which creates hurdle to import from India.
	The sourcing decision is in Japan. Hino's focus is also either locally or from ASEAN countries due to government policy advantage.
	Hino is no.1 player in HDT & MDT vehicles and produce around 10000 vehicles per annum.
11.2 Allied Component Manufacturer having factory in Thailand	
MICHELIN TYRES Mr. Jaipetch Chevaphatrakul- Commercial Director Mr. Wipark Wongthanasophon- Logistics Engineer	Michelin is No 1 player in Tyre market .
	For allied products i.e. Wheels they have tie up with European, Indian wheel manufacturers.
	Recently thay have started imports from Chines wheel manufacturers also.
	They are introducing new technology i.e. Tubeless tyres for Commertial Vehicles & for that they need allied products.
	As per Michelin Quality of Indian products are good compare to Chinese products, but price wise they are costlier, as base price of Chinese product is less + Import duty 0% against 30% for Indian products.
	They are aware of FTA between India & Thailand, however duty advantage is very low i.e. 1% reducing every year.
	As per Michelin some customer prefer Quality products & hence they prefer Indian products over Chinese product though the price is high.
BRIDGESTONE TYRE	
Mr. Samith Saengfai – Section Manager Marketing	Bridgestone is No 2 player in Tyre Mkt. For allied products i.e. Wheels they have tie up with Topy Japan.
Mr. Dechapol Semrat / Marketing Section	Recently they have started imports from Indian wheel manufacturers also.

 ISBN: 978-81-910118-7-6

Mr. Vitawat Wonnakittikun	Concerned on Chinese product, hence not started imports for China products
	As per Bridgestone, Quality of Indian Products is compatible to Japanese products & customers are accepting the same.
	Bridgestone is No 2 player in Tyre Mkt. For allied products i.e. Wheels they have tie up with Topy Japan.
11. 3 EXHIBITION:- Bus & Truck Show 2011	
Overall response was good and big OEMs like Hino, Fuso along with Indian Manufacturers like Tata Motors, Ashok Leyland participated in this. Good nos of exhibitors of Automobile components mainly the dealers exhibited their products in exhibition.	
It is good opportunity to meet with people to understand market, potential, competitors & also to explore possibility of appointing Dealer for our product. One to one meeting can be arranged after this exhibition with potential dealer.	
Researcher has interviewed following dealers to understand market in detail..	
Name of Dealer & Person contacted	Observations
CHAVAKIT Mr. Watcharaphon Nuanyaisrithong (Toom) – Asst. Managing Director	Selling entire range of wheel rims and focusing on niche market.
	Presently importing from China (Centurian) and selling around 10000 to 12000 wheels per annum.
	They are also having dealership of BKT & Apollo Tyre from India.
	They believe that there are customers for quality products also and would like to focus on those customers with Indian products.
	However they would like to continue with Chinese product to cater mass.
GOODTIRE RETRADING CO. LTD. (TOYO TIRES)	They are mainly in re-trading business and having 3 factories for re-trading.
Mr. Passakorn Ratanareekul – General Manager Mr. Wongsakorn Rattanareekul – Sales Engineer Manager	Good spread throughout the market. Presently they have taken up dealership of Toyo Tyres of Japan and also Topy Japan.
	However, they are finding tough to sell Japanese due to higher price.
	They are very much keen to work with Indian products along with Toyo tyres.

	Presently they are selling around 700 to 800 tyres per month. Good potential for Indian products.
EUROTYRE	They are the dealers of Continental tyres.
Mr. Pichit Lertudomtana – Managing Director	Continental is importing tyres from Malaysia. Presently they are selling Chinese wheels with tyres.
MR. Phattanatarana – Sales Dept.	However interested in Indian products, however concern due to price.
WELL INTERPARTS	They are very good company present in all trailer parts.
Mr. Kowit Limratanasaran – Managing Director	Presently importing wheels from China.
Mr. Komsun Kijtawesataporn – Business Development Manager	They concerned for Indian products against Chinese competition due to price + Duty impact.
	Almost all the trailer manufacturers shifted to Chinese products for most of their requirements

Marketing Strategies for Thailand Market:

1) One needs to understand the Socio –Economic culture of Country which needs to be targeted. Details about Thailand is provided in above study.
2) Understand market in India, in this case researcher has studied the Indian Automobile & Auto component Market.
3) Study the market in Targeted country, in this case researcher has studied Thailand Automobile market.
4) Study India's Foreign Trade policy. Any Free Trade Agreement with Target country, duty structure for product. Also needs to study Foreign trade policy (Mainly Import Policy) of Targeted countries. Bilateral trade agreement with ASEAN countries is one of the recent example of FTA signed by India in 2009.

After signing of FTA trade between India & Thailand (Part of ASEAN country) also increased from USD BN 4.67 in 2009-10 to USD BN 6.54 in 2010-11 to USD BN 8.34 in 2012-13, again growth of 40-30% YOY.

5) However one interesting thing noticed that Import of India from ASEAN countries also from Thailand is more than its Exports. Main reasons are as follows:-
   a. Competition from Chinese goods in ASEAN countries. China has signed agreement with these countries long back, hence by this time import duty has reduced drastically. Even in some countries like Malaysia duty on Chinese good is 0%.
   b. India has just signed the FTA, Import duties are reduced in steps i.e. 1% every year, hence still significance

 ISBN: 978-81-910118-7-6

advantage is not there for export to ASEAN countries. However Import Duty Tariff is on lower side for India, which helps them to export to India.

6) Needs to visit International Exhibition related to our product in that country. For Automobile components BUS & Truck Show is one of the ideal exhibition where OEM's, Auto component manufacturers (Local as well as overseas), various dealers are participating & also visiting. Also if possible exhibit your product range to find potential dealer + advertise your product.

7) Visit to 1-2 OEM's to understand their requirement, present sourcing & other issues like duty structure & other benefits. In case of Thailand preference is given to sourcing from ASEAN countries & they have significant duty advantage under localization policy & certain % needs to be sourced from ASEAN countries. Also there is duty advantage for CKD parts. Individual procurement other than ASEAN or Chinese countries will invite duty from 10% to 30%. Researcher has approached to main OEM players i.e. Hino & Isuzu to understand their views on Indian auto component. Most of the sourcing decisions of OEMs are with their head office, mainly in Japan. In case of entry to OEM needs to approach from their head office.

8) Visit to 5-6 main Dealers/ end users in the market to understand requirement of spare market, present sourcing whether local or other country, present pricing. Researcher has visited 5 such major dealers to understand same from them. Most of them are importing from China at a very low price.

9) Visit to 2-3 manufacturers of Auto component to understand market from their perspective. Customer preference for quality, brand value, price. Also to find possibility to join with allied products through such manufacturer & their distribution channel. For e.g Wheel rim manufacturers can approach Tyre manufacturers & jointly they can approach market.

Conclusion:

After studying the both market from various dimensions & Research conducted in Thailand for Auto Component markets researcher has drawn following conclusion:

1) Thailand is Growing market & having good potential of import for certain auto components e.g. Tyre & Wheels.

2) Due to China-ASEAN Free Trade Area (CAFTA), significant advantages to Chinese products as duty is 0% + Basic price of Chinese product is lower. However customers are having Quality concerns regarding Chinese products.

3) Focus of OEM"S is mainly on localization of products due to certain advantages.

4) Customers are aware about good quality of Indian products & good acceptance on quality front for Indian product.

5) In light of above points, India manufacturer can find out niche market for their products at premium price, as good potential & acceptance in certain segment where Quality is driving force than price.

6) Participate in Exhibition to exhibit product range & find potential good dealer for their product. They can also tie- up with allied product manufacturer for joint promotion.

7) If interested in OEM's, Indian manufacturers are having good potential, however needs to approach from Head office of respective OEM.

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ISBN: 978-81-910118-7-6

Non-Conventional Source of Energy: Current Scenario and Trends in India

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Abstract:

This paper reviews the Non-Conventional energy scenario of India and extrapolates the futuredevelopments keeping in view the consumption, production and supply of power/ Energy.Non-Conventional Source of Energy has had a steady growth in power systems worldwide. The high improbability about what type of Non-Conventional technology meets technical and economic variables of the energy markets and what could be the participation in the energy matrix are important long term energy planning challenges different scenarios of future development of the technological contribution of Non-Conventional. The scenarios illustrate the need to strengthen the transmission system and the importance of improving and incorporating mechanisms to reduce dependence on fossil fuels and the maximization of Non-Conventional resources. Future work will establish the impact of intermittent Non-Conventional technologies on power system operation.

Key Words: *Solar energy, wind energy, tidal energy, bio mass fuel, Non-Conventional energy*

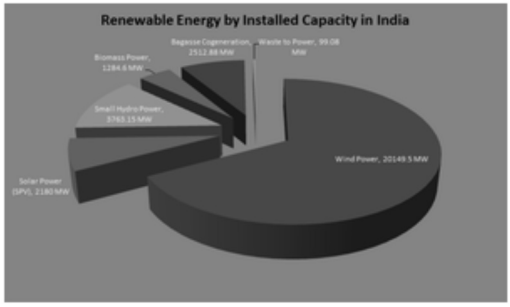
Introduction:

India was the first country in the world to set up a ministry of Non-conventional energy resources, in early 1980s. India's cumulative Grid interactive or Grid Tied Non-conventional Energy Capacity (excluding Large Hydro) has reached 29.9 GW, of which 68.9% comes from wind, while solar PV contributed nearly 4.59% of the Non-conventional Energy installed capacity in India. Non-conventional energy in India comes under the purview of the Ministry of New and Non-conventional Energy.

The Industrial Revolution of the 19thcentury ushered in new technologies. The spurt in inventions in that century was unprecedented in many ways. Some of these inventions involved use of natural resources like coal and oil. The thought of exhaustible nature of these resources and the environmental damage from the use of these resources never occurred either to the inventors or the subsequent generations. In the quest to sustain galloping economic activity, the dependence on coal and oil has soared at a phenomenal rate over the years. The burnt fuels result in the release of carbon dioxide and other gases into the atmosphere causing environmental damage. It has become imperative to look at energy technology with a new perspective. There are abundant Non-Conventional sources of energy such as wind, sun, water, sea, biomass apart from even daily wastes. These sources are pollution free and hence

 ISBN: 978-81-910118-7-6

clean energy apart from being unlimited/ inexhaustible. Power generation in India has grown in size to around 1 lakh MW and in Tamil Nadu it has increased to 7924 MW which is distributed through a vast network of transmission, sub transmission and distribution lines that reach all villages even in remote areas. The demand for power is growing rapidly. The problem will be compounded due to fast depletion of fossil fuel deposits,quality of fuels, heavy price to be paid for basic materials plus their transportation cost and above all the environmental degradation caused by the use of conventional energy sources. Under such conditions, environment-friendly and pollution-free, and Non-Conventional energy sources known as 'clean and green energy' have emerged as important alternatives to conventional energy sources. The Non-Conventional energy sources are clean and inexhaustible as they rely on sun, wind, biomass, etc., as primary sources of energy. It is estimated that, about 2000 MW can be generated from wind potential available in Tamil Nadu.As against this potential,19 MW of power in the State Sector mostly through demonstration wind farms and 838 MW in the private sector have been harnessed as on 31.3.02, Under Biomass, the estimated potential is about 500 MW and 154 MW capacity has been expected using biomass/ bagasse. The country is endowed with large amount of sustainable resource base and non-conventional energy technologies which are well-suited for grid connected power generation, energy supplies in remote areas which are not/could not be connected to the grid and for captive consumption. Non-conventional energy sources like wind energy, solar energy through thermal as well as photovoltaic system, biomass and hybrid sources will help to a great extent in enhancing power generation capacity. Hence appropriate policies and programs that optimize the use of available energy resources with new technologies have to be propagated, promoted and adopted, if necessary, by budgetary support. India has done very well in promoting and harnessing Non-Conventional sources of energy particularly wind and bagasse based power generation. With a view to develop and propagate the non-conventional sources of energy.


Renewable Energy by Installed Capacity in India
Bagasse Cogeneration, 2512.88 MW
Waste to Power, 99.08 MW
Biomass Power, 1284.6 MW
Small Hydro Power, 3763.15 MW
Wind Power, 20149.5 MW
Solar Power (SPV), 2180 MW

Sources of Non-Conventional energy in India as of December 2013, MNRE India

Non-Conventional Energy Sources in India

Total Non-Conventional Energy Installed Capacity (December 2013)

Source	Total Installed Capacity (MW)
Wind Power	20,149.50
Solar Power (SPV)	2,180.00
Small Hydro Power	3,763.15
Biomass Power	1,284.60
Bagasse Cogeneration	2,512.88
Waste to Power	99.08
Total	29,989.21

Wind power:

The development of wind power in India began in the 1990s, and has significantly increased in the last few years. Although a relative newcomer to the wind industry compared with Denmark or the US, domestic policy support for wind power has led India to become the country with the fifth largest installed wind power capacity in the world. As of December 2013 the installed capacity of wind power in India was 20149.50 MW, mainly spread across Tamil Nadu (7162.18 MW), Maharashtra (3021.85 MW), Gujarat (3174.58 MW),Karnataka (2135.50 MW), Rajasthan (2684.65 MW), Madhya Pradesh (386.00 MW), Andhra Pradesh (447.65 MW),Kerala (35.10 MW), West Bengal (1.10 MW), other states (3.20 MW) It is estimated that 6,000 MW of additional wind power capacity will be installed in India by 2012. Wind power accounts for 6% of India's total installed power capacity, and it generates 1.6% of the country's power.[7] In its 12th Five Year Plan (2012-2017), the Indian Government has set a target of adding 18.5 GW of Non-Conventional energy sources to the generation mix out of which 11 GW is Wind Energy.

The evolution of windmills into wind turbines did not happen overnight and attempts to produce electricity with windmills date back to the beginning of the century. It was Denmark which erected the first batch of steel windmills specially built for generation of electricity. After World War II, the development of wind turbines was totally hampered due to the installation of massive conventional power stations using fossil fuels available at low cost. But the oil crisis of 1973 heralded a definite breakthrough in harnessing wind energy. Many European countries started pursuing the development of wind turbine technology seriously and their development efforts are continuing even today. The technology involves generation of pe Wind Mills were installed from 1997 to 2000 and another 4 mills were also installed by the end of 2002.Wind monitoring stations were set up in 11 centres in Coimbatore, Erode, Kanyakumari and Tuticorin to conduct Wind Resource Assessment study which helps to identify potential locations for wind mills.

Wind Power : Wind possesses energy by virtue of its motion .Any device capable of slowing down the mass of moving air can extract part of the energy and convert into useful work.

Following factors control the output of wind energy converter: -

- The wind speed
- Cross-section of the windswept by rotor
- Conversion efficiently of rotor
- Generator
- Transmission system

Theoretically it is possible to get 100% efficiency by halting and preventing the passage of air through the rotor. However, a rotor is able to decelerate the air column only to one third of its free velocity.A 100% efficient wind generator is able to convert maximum up to 60% of the available energy in wind into mechanical energy. In addition to this, losses incurred in the generator or pump decrease the overall efficiency of power generation to 35%.

 ISBN: 978-81-910118-7-6

Principle of Energy Conversion

Wind mills or turbines works on the principle of converting kinetic energy of the wind into mechanical energy.

Power available from wind mill} = ½ □ A V^3

Where, □ – air density = 1.225 Kg. / m^3 at sea level. (Changes by 10-15% due to temperature and pressure variations)

A – Area swept by windmill rotor = □ D^2 sq.-m. (D – Diameter)

V – Wind speed m/sec.

Air density, which linearly affects the power output at a given speed, is a function of altitude, temperature and barometric pressure. Variation in temperature and pressure can affect air density up to 10 % in either direction. Warm climate reduces air density. This equation tells us that maximum power available depends on rotor diameter. Practically, wind turbines are able to convert only a fraction of available wind power into useful power As the free wind stream passes through the rotor, it transfers some of its energy to the rotor and its speed decreases to a minimum in the rotor wake. After some distance from the rotor wind stream regains its speed from the surrounding air. We can Also observe drop in pressure as the wind stream passes through the rotor. Finally air speed and pressure increases to ambient atmospheric condition.

Site Selection

Following factors are to be considered for selection of good site for wind power generation:-

- High annual wind speed.
- No tall obstructions for a radius of 3 Km.
- Open plain or open shore
- Top of a smooth, well rounded hill with gentle slopes
- Mountain gap which produces wind funneling.
- High annual average wind speed.
- Availability of wind curve at the proposed site.
- Availability of anemometry data.
- Wind structure at the proposed site.
- Attitude of the proposed site.
- Terrain and it's aerodynamic
- Local ecology.
- Distance to roads and railways.
- Nature of ground.
- Nearness of site to local center\users.
- Favorable land cost.
- Wind Electric conversion System

Energy Storage

Wind power turbines have operational limitations over very high and very low speeds. When the power generated exceeds the demand, excess energy can be stored to be used at other times. Excess energy can be conveniently stored in storage batteries in the form of chemical energy. Excess energy can also be stored in water power storage in the form of mechanical energy. Wind power plant (WPP) along with Hydroelectric power plant (HPP), when generated power (Pg)

exceeds the power demand (Pd), helps to partly divert hydro power plant output to Pumping motor (PM) to pump water from an auxiliary reservoir at the bottom of the dam to main reservoir.

The largest wind farm of India in Muppandal, Tamil Nadu.

These are some of India's largest wind farms:

Largest wind farms in India

Wind farm	Producer	State	Current capacity (MW)
Muppandal windfarm	Muppandal Wind	Tamil Nadu	1500
Jaisalmer Wind Park	Suzlon Energy	Rajasthan	1275
Brahmanvel windfarm	Parakh Agro Industries	Maharashtra	528
Dhalgaon windfarm	Gadre Marine Exports	Maharashtra	278
Chakala windfarm	Suzlon Energy	Maharashtra	217
Vankusawade Wind Park	Suzlon Energy	Maharashtra	189

Solar power

India is densely populated and has high solar insolation, an ideal combination for using solar power in India. Much of the country does not have anelectrical grid, so one of the first applications of solar power has been for water pumping, to begin replacing India's four to five million diesel poweredwater pumps, each consuming about 3.5 kilowatts, and off-grid lighting. Some large projects have been proposed, and a 35,000 km² area of the Thar Desert has been set aside for solar power projects, sufficient to generate 700 to 2,100 gig watts.

The Indian Solar Loan Programme, supported by the United Nations Environment Programme has won the prestigious Energy Globe World award for Sustainability for helping to establish a consumer financing program for solar home power systems. Over the span of three years more than 16,000 solar home systems have been financed through 2,000 bank branches, particularly in rural areas of South India where the electricity grid does not yet extend.

Launched in 2003, the Indian Solar Loan Programme was a four-year partnership between UNEP, the UNEP Risoe Centre, and two of India's largest banks, the Canara Bank and Syndicate Bank.

Announced in November 2009, the Government of India proposed to launch its Jawaharlal Nehru National Solar Mission under the National Action Plan on Climate Change with plans to generate 1,000 MW of power by 2013 and up to 20,000 MW grid-based solar power, 2,000 MW of off-grid solar power and cover 20 million sq meters with collectors by the end of the final phase of the mission in 2020. The Mission aims to achieve grid parity (electricity delivered at the same cost and quality as that delivered

 ISBN: 978-81-910118-7-6

on the grid) by 2020. Achieving this target would establish India as a global leader in solar power generation.

Solar Resource Map of India

Solar Power was once considered, like nuclear power, too cheap to meter but this proved illusory because of the high cost of photovoltaic cells and due to limited demand. Experts however believe that with mass production and improvement in technology, the unit price would drop and this would make it attractive for the consumers in relation to thermal or hydel power. The Solar Photo Voltaic (SPV) technology which enables the direct conversion of sun light into electricity can be used to run pumps, lights, refrigerators, TV sets, etc., and it has several distinct advantages, since it does not have moving parts, produces no noise or pollution, requires very little maintenance and can be installed anywhere. These advantages make them an ideal power source for use especially in remote and isolated areas which are not served by conventional electricity making use of ample sunshine available in India, for nearly 300 days in a year. A Solar Thermal Device, on the other hand capture and transfer the heat energy available in solar radiation. The energy generated can be used for thermal applications in different temperature ranges. The heat can be used directly or further converted into mechanical or electrical energy.

Future of Solar Energy:

The success of solar power will depend on the answer to the following question: "What do you do when the sun goes down? The simple answer is to build an auxiliary system that will store energy when the sun is out. However, the problem is that such storage systems are unavailable today. Simple systems, like water pipes surrounded by vacuum, do exist. It is based on the concept that provided the pipes are insulated, the water will store thermal energy. The ocean is a natural reservoir of solar power and could be used as a source for thermal energy. If we can draw warm water from the surface and cold water from the depths, an ocean thermal plant could operate 24 hours a day. Cold water from the pipe and warm water from the surface were pumped into a plant on shore. It produced 22KW when the water temperatures were optimum and 12KW when seasonal current fluctuation reduced the efficiency. There are also the hybrid systems. Wyoming has a system that holds backwater on a neighbouring hydroelectric plant when the

wind is blowing, which for the time being, runs the turbines. As discussed earlier, wind is an indirect form of solar energy. Thus the hybrid system is used in the fuel saver mode. Research on photovoltaic cells will continue. Compared to the other options, majority of the resources will probably flow into research for developing better and more efficient solar cells. Parallel to that, more research will be undertaken to develop rechargeable batteries that will last longer hours.

Why is solar energy being used by indigenous cultures?

One could be that we are in trouble of running out of fossil fuel and environmentalists will eventually have their way with dams. Another could be that there is a market in solar energy. Governments are beginning to get involved and policies in these countries are shaping that encourage use of solar energy. Indigenous cultures are usually off of the grid, meaning they have no access to electricity. For fuel, many of these cultures use firewood or kerosene. Investors of traditional energy sources aren't typically interested in these rural communities because of economic inopportunity. Providing traditional sources of electricity for these traditional communities is terribly expensive and environmentally harmful. Although these areas are being electrified decades after many places in the world, this form of electricity is wise because it is beginning from a source of Non-Conventional energy-the sun. The use of solar as a form of energy embellishes the sustainable form of life these people have been leading while also advancing them in technology toward an increased standard in living. However, one must remember that in this day and age, no new development program comes without incentive, usually a marketable one. Solar implementation in developing nations is marketable because it allows these poor places to enter into the global market. But before we get too critical about globalization, the benefit of this type of development is that is environmentally sound and involves the people that live in these areas.

Where are solar energy projects being implemented the most?

The answer is-in developing nations. More specifically we find them in Asia, Africa, the Caribbean and Latin America. One example of the application of solar energy is in this village in Ghana, Africa. For just under $200,000, this community of 300,000 people will be using solar energy. Not only will they be solar electrified, but also a solar learning centre will be built teaching classes about such things as solar cooking. The World Bank has a programme to install home lighting system in 200,000 homes to Indonesia. SELF (Solar Electric Light Fund, Inc.) operates a rural solar enterprise in Karnataka, which provides solar services to rural households, and arrange financing and leasing of solar electric system. 80% percentage of solar energy in the world is being utilized by developing nations.

Applications:

1. Home lighting systems
2. Street and garden lighting system
3. Traffic control system
4. Railway signalling equipment

 ISBN: 978-81-910118-7-6

5. Battery charging e.g. Mobile, telephones.

Name of Plant	DC Peak Power (MW)
Welspun Energy 50MW Rajasthan Solar Project – Phalodhi, Rajasthan	50
Mithapur Solar Power Plant – Mithapur, Gujarat (Tata Power)	25
Waa Solar Power Plant – Surendranagar, Gujarat (Madhav Power)	10
Charanka Solar Park – Charanka, Gujarat	214
Adani Power Bitta,Gujarat	40
Moser Baer Clean Energy Limited – Banaskantha, Gujarat	30
Sivaganga Photovoltaic Plant	5
Kolar Photovoltaic Plant	3
Itnal Photovoltaic Plant, Belgaum	3
Azure Power – Photovoltaic Plant	2
Jamuria Photovoltaic Plant	2
NDPC Photovoltaic Plant	1
Thyagaraj stadium Plant-Delhi	1
Gandhinagar Solar Plant	1
Tata – Mulshi, Maharashtra	3
Azure Power – Sabarkantha, Gujarat	10
Tata – Mayiladuthurai, Tamil Nadu	1
REHPL – Sadeipali, (Bolangir) Orissa	1
TATA – Osmanabad, Maharastra	1
Green Infra Solar Energy Limited-Rajkot, Gujarat	10
Total	363

Bio-energy:

Biomass is yet another important source of energy with potential to generate power to the extent of more than 50% of the country's requirements. India is predominantly an agricultural economy, with huge quantity of biomass available in the form of husk, straw, shells of coconuts wild bushes etc. With an estimated production of 350 million tons of agricultural waste every year, biomass is capable of supplementing coal to the tune of about 200 million tonnes producing 17,000 MW of power and resulting in a saving of about Rs.20, 000 crores every year. Biomass available in India comprises of rice husk, rice straw, bagasse, coconut shell, jute, cotton, husk etc. Biomass can be obtained by raising energy farms or may be obtained from organic waste. The biomass resources including large quantities of cattle dung can be used in bio-energy technologies viz., biogas, gasifier, biomass combustion, co-generation etc. to produce energy-thermal or electricity. Biomass can be used in three ways – one in the form of gas through gasifiers for thermal applications, second in the form of methane gas to run gas engines and produce power and the third through combustion to produce steam and thereby power. Wind results from air in motion due to pressure gradient that is caused by the solar energy irradiating the earth.

Waste to energy:

Every year, about 55 million tones of municipal solid waste (MSW) and 38 billion liters of sewage are generated in the urban areas of India. In addition, large quantities

of solid and liquid wastes are generated by industries. Waste generation in India is expected to increase rapidly in the future. As more people migrate to urban areas and as incomes increase, consumption levels are likely to rise, as are rates of waste generation. It is estimated that the amount of waste generated in India will increase at a per capita rate of approximately 1-1.33% annually. This has significant impacts on the amount of land that is and will be needed for disposal, economic costs of collecting and transporting waste, and the environmental consequences of increased MSW generation levels.

Waste Energy in India:

Types of Waste Waste can be broadly classified into

- Urban Waste
- Industrial waste
- Biomass Waste
- Biomedical waste

Prominent companies in the Waste to Energy sector

- A2Z Group of companies
- Hanjer Biotech Energies
- RamkyEnviro Engineers Ltd

Other Sources

The other sources of Non-Conventional energy are geothermal, ocean, hydrogen and fuel cells. These have immense energy potential, though tapping this potential for power generation and other applications calls for development of suitable technologies.

Geothermal Energy :

Geo-Thermal energy is Non-Conventional heat energy from underneath the earth. Heat is brought to near surface by thermal conduction and by intrusion into the earth's crust. It can be utilized for power generation and direct heat applications. Potential sites for geo-thermal power generation have been identified mainly in central and northern regions of the country. Suitable technologies are under development to make its exploitation viable.

Advantages of Geothermal Energy :

Geothermal energy can be used instead of fossil fuels to produce electricity. Replacing fossil fuels will reduce the amount of air pollutants which can cause acid rain and contribute to global warming. Reducing the amount of oil shipped to the Big Island (officially called the Island of Hawaii) for electrical generation lessens the possibility of oil spills.

Electrical power generation:

A 30-megawatt geothermal power plant on the Big Island displaces the need to burn about 500,000 barrels of fuel oil every year. It eliminates the need to ship that amount of fuel oil from the refineries on the Island of Oahu to the Big Island, thus significantly reducing the risk of oil spills HDR electric plant could continuously generate power 24 hours a day and supply additional peak load power for a few hours each day. It is a reliable energy and stable with time since it does not depend on atmospheric or climatic conditions. It respects the environment,

 ISBN: 978-81-910118-7-6

and has little or no effect on it. It generates almost no polluting substances, very little carbon dioxide and only a small quantity of hydrogen sulfide (HS). Most of these products are reinjected into the groundwater and not into the environment. Geothermal wells have a very limited visual impact. Once a well has been drilled it is completely invisible, since the wellhead is buried. One of the main advantages of HDR geothermal energy is the low environmental impact. As the energy is derived from converting heat extracted from hot rocks there are no gas emissions. Unlike burning fossil fuels, no CO2 is released into the atmosphere. The process does not produce any waste dumps and has a low noise impact. The construction of a HDR geothermal power plant leaves only a small environmental footprint. Site disturbance is limited to drill holes and pipelines, and a building to house the power plant.

Ocean thermal and Tidal energy:

The vast potential of energy of the seas and oceans which cover about three fourth of our planet, can make a significant contribution to meet the energy needs. Ocean contains energy in the form of temperature gradients, waves and tides and ocean current, which can be used to generate electricity in an environment-friendly manner. Technologies to harness tidal power, wave power and ocean thermal energy are being developed, to make it commercially viable.

Hydrogen and Fuel Cells:

In both Hydrogen and Fuel Cells electricity is produced through an electro-chemical reaction between hydrogen and oxygen gases. The fuel cells are efficient, compact and reliable for automotive applications. Hydrogen gas is the primary fuel for fuel cells also. Hydrogen can be produced from the electrolysis of water using solar energy. It can also be extracted from sewage gas, natural gas, naptha or biogas. Fuel cells can be very widely used once they become commercially viable.

Potential and Exploitation of Non-Conventional Energy Sources:

India ranks fifth in the world in Wind power with installed capacity of 1612 MW out of an estimated potential of 45,000 MW. In biomass power the country has an installed capacity of 381 MW out of total potential of 19500 MW. In the potential available under solar photovoltaic energy is 20 MW per Sq.Km. But in view of high cost and heavy investment involved the progress is rather slow. In Solar thermal energy (Solar Water Heater system) 15 lakh M2 collector area has been installed in the country against a potential of 1400 lakh M2.There is considerable scope for expanding this activity with suitable incentives. The major component of this has come from Wind Energy (858 MW) followed by co-generation in sugar industries (142 MW).Further, this has largely come about through private investment due to attractive policy initiatives of the State and Central Governments. It may be worthwhile to offer various incentives to enhance its share further in view of the vast potential available.

Integrated Rural Energy Planning (IREP):

The Objectives of the IREP Programme are:

i) To provide for minimum domestic energy needs for cooking, heating and lighting purposes to rural people

ii) To provide the most cost effective mix of various energy sources and options for meeting the requirements of sustainable agriculture and rural development with due environmental considerations.

iii) To ensure people's participation in planning and implementation.

iv) To develop and strengthen mechanisms and co-ordination arrangements for linking micro level planning for rural energy with national and State level planning and programmes. The programme is funded by Government of India which meets the staff cost and the State Government bears the scheme cost. The programmes implemented in the Ninth Plan period with subsidies ranging from 25% to 100% are:

   1) Improved Chula (100% subsidy)
   2) Frictionless foot valves (75% subsidy)
   3) Solar Cookers (25%) subsidy.
   4) Windmills for pumping water for community use (100% subsidy)
   5) Other energy saving devices (25% subsidy)

Energy Conservation and Audit

Energy Audit is a systematic approach for effecting energy conservation in an industry. Energy audit helps in identifying and assessing potential areas where energy could be conserved. The Government has made Energy Audit mandatory for the industrial sector and commercial sector with high tension power consumption with maximum demand exceeding 200 kVA under Phase I and between 1000 kVA to 2000 kVA under Phase II. (The new HT services covered under mandatory Energy Audit programmes are exempted from conducting energy audit for a period of 3 years from the date of service connection).

Bottlenecks and Constraints :

While the performance under the Non-Conventional energy sources programmes up-to Eighth Five Year Plan was relatively good, the pace of implementation suffered during the Ninth Plan period due to various constraints, some of which are as follows:

i) Non-Conventional Energy Technologies are capital intensive and require high initial investment which investors could not mobilize in the absence of financial support including capital subsidy from the Central Government/ State Government.

ii) The power purchase policy has not been encouraging for private entrepreneurs and suitable policy initiatives in the form of wheeling, and banking facilities, evacuation, arrangements, land allotment etc., need to be considered to boost investment.

iii) Technologies for several Non-Conventional energy sources have not fully stabilized which has hampered the development and hence more intensive

 ISBN: 978-81-910118-7-6

R&D efforts are called for with special focus on partnership with industry.

iv) Since the cost of Non-Conventional energy gadgets/ devices such as solar cooker, biogas, solar geysers, solar lanterns etc., is high, it is not possible to generate sufficient demand for these items though the people are aware of the advantages. Hence, the cost needs to be reduced through suitable support to manufacturers.

v) Fiscal incentives namely 100% depreciation attracted several private investors.

vi) Adequate number of professionally skilled manpower has not been developed in the Non-Conventional energy sector and hence training programmes may be organized to develop required manpower.

Vision:

- Provide and promote "clean and green energy" on much wider scale covering villages and towns to meet the decentralized energy requirements in agriculture, small scale industries, commercial establishments and households with priority for remote habitations which do not enjoy grid power.
- Enhance the generation of grid quality power through private investment for harnessing various Non-Conventional energy sources

Goal and Objectives:

EGEAS (Energy Sector Management Assistance Program) Studieswere carried out to assess the total capacity addition requirement during the 13th Plan to meet the demand within the confines of the reliability criteria.

The national goal of meeting 30% of grid capacity from Non-Conventional sources by 2015.Under the Tenth Plan, the goal is to consolidate and stabilize the share of grid connected power with addition of 550 MW and also achieve decentralized power generation to meet the local energy needs in agriculture, agro- processing, households etc., especially in remote areas and expand the use of Non-Conventional energy sources and promote energy efficiency and thereby energy saving.

According to Eleventh 5 year plan requirement is of 1,21,253GWh (34,801) and Additional capacity of 22,041(6,200)

Strategies:

i. Encourage and promote private investments in Non-Conventional energy through suitable policy initiatives at State level.

ii. Involve local bodies in developing decentralized power and its use in agriculture, household sectors etc.

iii. Establish field units to promote Non-Conventional energy at local levels by integrating existing programme staff.

iv. Enable suitable revision of power purchase rate for grid connected power to make it attractive for the investors.

v. Encourage research and development to improve efficiency of the devices and bring down the cost.

vi. Undertake awareness campaigns in Districts through seminars, exhibition, etc.

NewInitiatives:

The following new initiatives are proposed:

i. Undertake further studies for micros-ting for setting up of Wind Mills by identifying proper and suitable locations

ii. Undertake Biomass potential assessment studies at Taluk level and make data on Biomass potential available for prospective investors

iii. MergethestaffunderCentrallysponsored schemes like IREP and National Biogas Development programme and create field outfits to provide guidance and support to local bodies in tapping Non-Conventional energy.

iv. Popularize and propagate Non-Conventional energy use among industries and households in rural and urban areas & secure

v. Arrange for suitable adjustments in wheeling and banking facilities, and third party sale to attract further investment in Non-Conventional energy sector and designate TEDA as single window agency to facilitate smooth clearance for projects up-to certain capacity say 25MW

Conclusion:

The new hymn of the 21st century is sustainable development the future is bright for continued PV technology dissemination around the world. Technology fills a significant need in supplying electricity, creating local jobs and promoting economic development in rural areas, while also having the positive benefits of avoiding the external environmental costs associated with traditional electrical generation technologies. People, who choose to pursue a Non-Conventional and sustainable energy future now, are the ones showing the way for the future. Solar energy is presently being used on a smaller scale in furnaces for homes and to heat up swimming pools. On a larger scale, solar energy could be used to run cars, power plants, and space ships. This means that the local population should be able to absorb the development of a country or region. The people should be financially, mentally and physically able to support the improvement in the quality of their lives. We want the entire population to have access to uninterrupted supply of electricity. This puts a huge burden on the limited fossil fuel resources. The benefits of using wind power over other resources lies in its minimum operational cost. Depending on field of applications, various schemes can be adopted to get optimum output. Various option of storage facility makes it versatile source of energy. Modern turbines are totally controlled by computers that are totally safe. Since wind is clean source of energy, the power conversion does not pose any environmental hazard. Wave energy is promising holds huge potential to reduce reliance on fossil fuels. Carefully choosing sites that can withstand the alterations to the environment caused by power plants will be crucial to effectively develop these technologies without harming the ocean.

 ISBN: 978-81-910118-7-6

The expectations on fuel cell technology are very big .If you can manufacture PEM with long enough life spans, it will change the vehicle market completely. For small scale electric distribution there is a potential market provided that an acceptable fuel is nearby. For relatively small scale electric and heat production MCFC & SCFC have the potential of high efficiency. For larger scale power plants the image is not clear,but one can reach a high efficiency.

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ISBN: 978-81-910118-7-6

Organizational Structure in Retail Industry – A Comparative Study of Wal-Mart, Carrefour and Tesco

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Abstract:

A structure in an organization depends on the organization's objectives and strategy. It may be a centralized structure, or decentralized structure; it determines how the roles, power and responsibilities are assigned, controlled, and coordinated. This articles studies the organizational structure of three retail giants all over the world – Wal-mart Inc, Carrefour, and Tesco.

Key Words: *organization structure, Wal-mart Inc, Carrefour, and Tesco.*

Organizational Structure:

Organizational structure is a characteristic hierarchical arrangement of lines of authority, communications, rights and duties of an organization. Organizational structure determines how the roles, power and responsibilities are assigned, controlled, and coordinated, and how information flows between the different levels of management. A structure in an organization depends on the organization's objectives and strategy. It may be a centralized structure, where the top layer of management has most of the decision making power and has tight control over departments and divisions, or a decentralized structure, where the decision making power is distributed and the departments and divisions may have different degrees of independence.

Organisations are structured in different ways:

1. by function as described above
2. by regional area - a geographical structure e.g. with a marketing manager North, marketing manager South etc
3. by product e.g. marketing manager crisps, marketing manager drinks, etc
4. into work teams, etc.

Reporting in organisations often takes place down the line. An employee might be accountable to a supervisor, who is accountable to a junior manager, who is then accountable to a senior manager - communication and instructions can then be passed down the line.

In December 2012, Indian Parliament approved of the central government's decision to allow foreign direct investment (FDI) in multi-brand retailing. This paved the way for foreign retails to open retail stores with 51 per cent ownership in major cities to sell a large variety of products under one roof. To utilize this opportunity many multinational retail companies are showing interest in entering India. Out of these, Wal-

 ISBN: 978-81-910118-7-6

Mart, Carrefour, and Tesco are prominent. This article discusses the organization structure of these three companies.

Wal-Mart Inc:

Headquartered in Bentonville, Arkansas, U.S., Wal-Mart employs more than 1.8 million people worldwide boastsalmost 8,500 stores in 15 countries.

The partnership between Bharti Enterprises and Walmart has been dissolved. Formed in 2007, the joint venture's purpose was to build and operate cash and carry superstores in India under the name Best Price Modern Wholesale. As partners, the two companies jointly built 20 superstores across India.

Walmart management has said it wants to serve India and its people through its cash and carry business. Management believes that the company has in place the supply chain infrastructure, direct farm program, and supplier development that enables it to make good investments and provide good returns for its shareholders.

In this background here we study the organizational structure of Wal-Mart

Organizational Structure of Wal-Mart:

Workforce

Retail store employees include the hourly workforce, the store Management, and higher-level managers such as District Managers and Regional Vice Presidents. Thestore management positions include Store Manager, Co-Managers, Assistant Managers, and Management Trainees.

Wal-Mart's employee numbers are larger than most company's customer numbers. Each worker brings different talents, perspectives, values and experiences to the work team. Each employee pulls their own weight to get the job done.

The organizational Structure of the Wal-Mart Corporation is a formal, bureaucratic structure that has made some changes to its structure in 2010. The three successful operating divisions – Logistics, Real Estate and Store Operations are under a unified leadership team. This unified team is organized into three distinct geographic business units: – West, South and North. This has taken Wal-Mart from being departmentalized by function to geographic departmentalization.

- There is also a clear chain of Command from the top to the bottom.
- The span of control is narrow as the organization has management teams that decide how merchandise gets priced, how items are shipped, and other items that need to be managed.

Wal-Mart's governing body is the Annual Shareholders Meeting, which is responsible for electing directors to the Board of Directors, ratifying the appointment of the external auditor, voting on shareholder propositions and amending the Articles of Incorporation.

The executive body is the Board of Directors. As of early 2007, the Board had 14 members,10 of which are independent. The Board is responsible for developing strategy and policies for Wal-Mart. Supporting it

are five committees: Audit Committee; Compensation, Nominating, and Governance Committee; Executive Committee; Stock Option Committee; and Strategic Planning and Finance Committee.

Wal-Mart separates the function of Chairman of the Board and Chief Executive Officer (CEO).

Carrefour:

The €16.3 billion French retailer Carrefour SA plans to open eight to 10 wholesale stores in India, doubling its network in the country, and is searching for potential locations, said a person familiar with the development. Carrefour has four wholesale or cash-and-carry stores in India—in Delhi, Jaipur, Agra and Meerut—under Carrefour WC and C India Pvt. Ltd. The company new branches will locate two of the new stores in Bangalore, in states such as Haryana, Maharashtra and even West Bengal.

Carrefour – Organizational Structure

Carrefour has a hierarchical structure with a more functional managerial organizational structure. Their organization is such that the President of supervisory board and President of management board forms top of the hierarchy. Below him the Director of Organization and Systems and the Director of Merchandise and Marketing. Beyond the functional divisions lies the director for each specific global zone or region for which Carrefour is located.

This organizational structure works very efficiently for Carrefour. It delegates, to the major functions of the large corporation, the abilities to handle all of the necessary business dealing requested by each separate division. Allowing each function to know the dealings of each division allows them to compare better how each division is performing compared to the other divisions. This also allows for a more standardized means of coordinating the functions of each division, limiting confusion and overlapping responsibilities. Carrefour has several types of "products" (stores) and is located in over 20 countries, which would make a divisional structure very complex.

Tesco:

Jack Cohen (Tesco, 2008) founded Tesco Plc (TSCO.L) in 1919. After expanding into every available market in the United Kingdom, including developing new store formats for small areas (Tesco Metro) and a superstore format (Tesco Extra), new product lines such as electronics and home goods, and an environmentally-aware range of foods, the company began to expand internationally (Tesco, 2008). The first expansion was in 1995, when Tesco opened a store in Hungary (Tesco, 2008). Poland, the Czech Republic, Slovakia, Northern Ireland, the Republic of Ireland, Taiwan, Thailand, and South Korea followed this initial expansion in the 1990s (Tesco, 2008). Today, Tesco serves a total of twelve international markets, plus all areas of the United Kingdom (Tesco, 2008).

Tesco, the third-biggest retailer in the world, has applied to India's Foreign Investment Promotion Board and initially plans to invest $110 million in the country.

 ISBN: 978-81-910118-7-6

On acceptance of the bid, Tesco operate in India through a 50-50 partnership with the Mumbai-based conglomerate, Tata group - Tata-controlled Trent Hypermarket Ltd., which operates the Star Bazaar and Star Daily franchises in the western India province of Maharashtra and in the southern state of Karnataka.

Headquartered in Cheshunt, Hertfordshire, England, Tesco listed on The London Stock Exchange with a revenue of £64.8 billion last year. It Runs over 6,000 outlets across the UK, Europe, Asia (exited the US market recently) with range offers like Cash & carry, convenience store, department store, discount store, hypermarket/supermarket

Organization Structure at Tesco:

The organization structure of Tesco is a hierarchy structure where the structure has many layers and a lot of people are assigned with the reporting responsibility before the information gets to the senior management and the boss. The tall hierarchy structure of Tesco allows multiple operations to take place specifying each department about their responsibility and the relationship of their work with other department. Tesco has recently delayer its organization layers and is moving towards decentralization to improve the employee performance and take effective and immediate decisions in case of any problem and uncertainty.

Tesco basically has a 6 level organization structure

- Work level 1 - frontline jobs working directly with customers. Various in-store tasks, such as filling shelves with stock. Requires the ability to work accurately and with enthusiasm and to interact well with others.
- Work level 2 - leading a team of employees who deal directly with customers. Requires the ability to manage resources, to set targets, to manage and motivate others.
- Work level 3 - running an operating unit. Requires management skills, including planning, target setting and reporting.
- Work level 4 - supporting operating units and recommending strategic change. Requires good knowledge of the business, the skills to analyse information and to make decisions, and the ability to lead others.
- Work level 5 - responsible for the performance of Tesco as a whole. Requires the ability to lead and direct others, and to make major decisions.
- Work level 6 - creating the purpose, values and goals for Tesco plc. Responsibility for Tesco"s performance. Requires a good overview of retailing, and the ability to build a vision for the future and lead the whole organisation.

Conclusion:

In any organization's success, the structure of an organization play a major role. This organization discussed about the organizational structures of three prominent and successful multinational

retail organizations which are showing interest in doing business in India. Local retail companies can also learn many success factors of these giant organizations and implement necessary changes to get succeeded in long run.

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ISBN: 978-81-910118-7-6

Neuro Marketing: Window to the Customers Mind

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Abstract:

NeuroMarketing is where science and marketing meet. A research discipline that's still in its infancy, NeuroMarketing uses high–tech brain scanning techniques, such as fMRI and EEG, to investigate brain activity. This neuro–imaging hardware enables us to examine andanalyze what really drives our behavior, our opinions &ourpreference.Starting from the "perception law" stated by Al Ries and Jack Trout, according to which "Marketing is not a battle of the products, but of the perception consumers have about products", it can be stated that the great battle in marketing is for creating a position in the potential consumer's mind, and in order to find out how consumers really think a wide range of methods and techniques have been applied, the most innovating being the neuromarketing. Neuroscience techniques are particularly useful in uncovering two types of information: things peopledo not want to reveal, and things people are unaware of or do not realize have influenced them.As it is becoming very difficult to predict the consumer's response patterns, Neuromarketing serves as an innovative approach to read the mind of customers and benefit the customers as well as industry.

Key Words: *Neuro Marketing, Perception, fMRI (functional Magnetic Resonance Imaging) technology, EEG(Electroencephalography)*

Organizational Structure:

Neuromarketing researches have been developed in the United States since1991. First, they were results of the researchlaboratories that were specialized inneurosciences, research that were requestedby important companies.Although this research was initiallyconfidential, the collaboration withimportant companies (Coca-Cola, L-mart,Levi-Strauss, Ford, Delta Airlines etc.)interested in the results developed moreand more.The father of neuromarketing, professor Ale Smidts, (winner of the Nobel Prize for Economy in 2002), designates the use of identification techniques of cerebralmechanisms to understand the consumer's behaviour, in order to improve the marketing strategies". NeuroMarketing is a technique of marketing that studies consumer's brain activity to study the effect of advertisements and commercials on them. It is a neuroscientific method to understand and analyze their emotions and changing behavior related to markets. Marketing analysts use this technique to have a better measurement of consumer's preferences over their verbal responses. Researchers use brain imaging tools like electroencephalography (EEG), Magnetoencephalogram (MEG) and

 ISBN: 978-81-910118-7-6

functional Magnetic Resonance Imaging (fMRI) methodology to capture and analyze brain signals of the subject. It's not only our brain which responds, there are many other things which respond and show emotions like our skin, facial expressions, eyes, and heart. Therefore, other parameters like heart rate, galvanic skin resistance, respiration pattern, skin temperature, and eye tracking results are captured to analyze the emotions of subjects towards the product. This information is useful for marketing analysts to understand the emotional bond of the individual with the product and how it can be enhanced to make that emotional bond stronger. NeuroMarketinghelps us make the transition towards understanding the truths and myths about the reason for our purchases.

Although, at around 1.5kg the human brain represents only around 2% of body weight it accounts for some 20% of the total energy consumption. Remarkably 95% of this energy is used by the brain not to process incoming information from the senses, such as sights and sounds, but on internal communications. In other words, the brain is 'talking' to itself. Since none of these internally generated exchanges ever penetrate into consciousness we remain blissfully unaware of what is really going on. This means that even the most painstakingly introspective and co-operative individuals are utterly incapable of providing a full and accurate insight into the reasons behind their choices, decisions, attitudes and assumptions. By using EEG as the chief tool of exploration one is able to obtain real time insights into the function of the brain not only at the cortex (the thin outer layer of grey matter that covers the brain like a tree bark – from which it gets its name) but into the depth of the brain. As a result of massive interconnections between the grey matter and the regions beneath – regions in which incoming sensory information is integrate and emotions develop – surface sensors can detect the interplay between the different layers of the brain as they occur. In this sense the data shows not a reflection of the thought processes and their associated emotional states, but thinking itself.

Professor Antonio Damasio, a leading expert in neuroscience, wrote,"Over time, emotions and their corresponding bodily change(s) become associated withparticular situations and their past outcomes." When make decisions, people consciously orsubconsciously associate these physiological signals, or "somatic markers," and their evokedemotions with their past outcomes, and they bias decision-making toward certain behaviors.Evidence from brain scans shows that emotions impinge directly on consumer decision making. That fits with what the psychology of customer experience is about: finding thatemotional connection.

Further evidence comes from studying patients with damage to certain regions of their frontallobe. They can still reason logically, but because they have lost the ability to feel emotion, theirdecision-making ability is flawed as we need emotion to decide. Other evidence from neuroscience highlights the importance of subconscious and memorablemoments. Even when people cannot remember how they made

a decision, they like to say theymade the logical decision. However, evidence says it is not all logical and the subconscious is critical. It is noted that the subconscious processes 200,000 times more information than theconscious mind and processes emotions about 10 times faster than the conscious mind.

Customer experience is no longer just about the "4Ps" from the old paradigm—the mixture ofprice, product, promotion, and place. In the new paradigm, it is about seeing theexperience, feeling wowed by the experience, having that feeling embedded in memory, andcreating the emotional connection that makes the customer want to return and stay with thatcompany in the long term—in effect, creating loyalty. The economics behind experience are all around loyalty, recommendation and customer lifetime value. Until now, most marketing, advertising and branding strategies havebeen built on qualitative and quantitative market research. The fact is,roughly 90% of our consumer buying behavior is unconscious, and wecan't actually explain our preferences, or likely buying decisions, withany accuracy. So market surveys and customer questionnaires are ofdubious value. As brands pour millions of dollars into advertising thatmay or may not hit the mark, we realize that the time has come for aparadigm shift. Advertisers need to know what directs our buyingdecisions. NeuroMarketing will help us make the transition towardsunderstanding the truth and lies about why we buy. It circumvents thequestion and answer approach of conventional research. A non–verbalresearch method, NeuroMarketing bypasses a subject's claims bygoing straight to the source and examining the consumer's brainresponses.

In marketing there has always been a question left without an adequate answer: in what measure is the quality of a product, even well known to the consumers, a source of competitive advantage. The classic example has been offered by the fight between Coca Cola and Pepsi Cola. Trying to increase its share of the market, Pepsi launched a campaign in the 70's called The Pepsi Challenge. A series of tests were done in supermarkets and mini-markets, in which the buyers were asked to, decide which of the two drinks is tastier. Without knowing what drinks were studied 57% of participants chose Pepsi and only 43% Coca-cola. These results were intensely exploited from commercial point of new and to prepare the selling force, but the effect over the increase on the market share was not significant.

For 30 years ago, the obstinacy of consumers buying a product that they know is less testy than its direct competitor, was a mystery, was explained by a strange "branding effect" that could not be split into pieces in order to be repeated.

In 2003 in an experiment that draw the attention over neuromarketing, Redd Montague repeated the experiment, but measuring this time by f MRI the activity of various parts of the brain. The results were never extremely interesting.

- when they didn't know what drink they had,75 % of subjects preferred Pepsi,

 ISBN: 978-81-910118-7-6

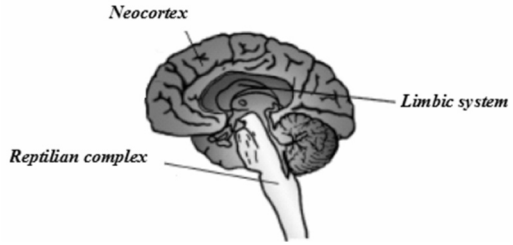
the drink that would activate strongly the part in the brain corresponding to the satisfaction sensation pleasure;

- when the subjects know what drink they aretasting the ratio reversed; at 75 % of the tastedpersons Coca–Cola determined the stimulationsof the part of the brain corresponding to thevalue judgment, rationality and emotionalmemory.

The experiments show that the image of the branddetermines emotions that can be stronger than thedirect effect of the product. This is thedemonstration of David Ogilvy statement that"products are created in the factory, but the brandin the consumer's mind".Companies like Hyundai, PepsiCo, Google, Microsoft, Yahoo and Walt Disney Co. are using this technique to know what user thinks about the new products they launch or to what their adverts make user feel.

Maximizing the impact of commercials

The neurologist Paul McLean proposed a model ofthe human brain (see figure 1) composed of 3superimposed structures, each one specialized oncertain functions:



- R complex (reptilian) or the primitive brain,controls the body and decides very rapidly onthe strategy to be used (act, retreat or wait), inorder to assure the satisfaction of fundamentalneeds (physiological,sexual,security,defending the territory etc.);
- Limbic system or the emotional brain,associated with emotions, feelings, attention, general attitude, memory (remembering events), immunity and hormonal equilibrium, relationships with others; its decisions refers tothe pleasure or un-pleasure which we associatewith that situation;
- Neocortexor the rational brain, whichanalyzes, and solves problems, uses languageand logics, builds rational memories (much assubjects studied for an exam) and leads tocreative thinking; its decisions refer toconforming to rules and past experiences,believes and personal values, self-image.

Shortly, it may be stated that, in contact with aproduct, the rational brain evaluates, the emotionalbrain feels, the primitive brain decides what is tobe done. We are only aware of the results ofrational evaluation and partly of the effect over theemotional state.If basic reactions and emotions, are not involved,the commercial ad is ignored. Thus, to beeffective, the commercial must firstly address tothe emotional and primitive brain, which must bedetermined to open the attention channel, and leadthe information to the relational brain.

In 2003, Daimler-Chrysler financed an experiment aimed to establish the type of automobile which men desire. The result wasn't unexpected, more than two thirds wishing a sports car, about 25% limousines,

and the rest compact cars. The important aspect of this test was that it was put into evidence that sports cars activate strongly a part of primitive brain, initially thought to be involved in making decisions regarding vital elements (good food, attractive and available partner).The activation of this part, oftenly leads to unthought-of gestures, the man instinctively acting to get that toffee. Also, it activates neuronal circuits of rewarding, producing a deep emotional state. This way, the rational brain is conditioned to find justifications and solutions to get that product.

Successful examples of using Neuromarketing.

- Procter & Gamble representatives said that, due to neuromarketing, the launch of the product Febreze was the most successful in the history of the company.
- For Motorola, the neuromarketing had important implications in the positioning of certain products. The representatives of the company said that in this way you can get the answer to questions you've never thought asking.
- Using this technique, Delta Airlines managed to implement on company level the idea that the accumulated experience over the years is extremely valuable.

This is not to say that marketersneed to turn their backs on triedand-true research techniques infavor of neuroscience, but it has to be appreciated that neuroscience can offeran additional perspective on consumerresponses and motivation. Therefore, the approach suggested is to roll out neuroscience-based methods alongside – andintegrated with - existing tools,rather than as a replacement. Eachmethod is used when it will addvalue and when it is relevant to theclient issue.

Neuroscience-based techniques willtend to add the most value undercertain circumstances such as:

Dealing with sensitive material:This is when qualitative/survey methods are most vulnerableto distortion, so methods that don'trely on explicit questions can revealunstated attitudes more effectively.

Dealing with abstract orhigher-order ideas:Consumersface challenges when trying to talkabout the often complex ideas atthe heart of many brands' positioning.Implicit association methods,in particular, can be useful at probingfor ideas that participants thinksound strange or overblown on asurvey or which they might discountas irrelevant when answeringexplicit questions.

Probing for transient responses to ads or brand experiences: Consumers are great attalking about the gist of an ad orbrand or experience but they maynot be able to articulate all thesteps in the process that got themthere. Biometric methods, such asEEG, can add value in pinpointingthe emotional or cognitive highlightsand low points in a piece ofcreative, or the focus of attention,which can provide useful insightsfor developing more effective campaignsfor brand experiences.

Giving more detail on consumers' feelings:Feelings can bedifficult for people

 ISBN: 978-81-910118-7-6

to talk about,though qualitative and survey-basedmethods can help people do this. However, neuroscience methodscan add an additional level of detailhere, about the depth of emotionalresponse, the timing of theseresponses and the elements of an ador brand that are driving the wayconsumers feel. Given the importanceof emotion in motivatingbehavior, these methods have a roleto play here.

In terms of specific researchapplications, the differing advantagesof each method mean theylend themselves to different areasof research. Implicit associationmeasurement is well-suitedto brand strategy work, producttesting, concept testing andassessment of communicationfrom marketing campaigns. Eyetrackingis strong on in-store andonline marketing optimizationand advertising development. Brainwave measurement addsgreater detail in these areas, especiallyregarding emotional andcognitive responses, and thuslends itself to advertising optimization. It is expected that the future, neuroscience-basedresearch will be a standard tool inthe researcher's toolkit but it won'tbe the only tool. Neurosciencetechniques on their own can't fullyexplain consumers' responses. Themost complete understanding willcome from integrating informationrather than looking at one perspectivealone and using the right toolat the right time.

Conclusion:

NeuroMarketing techniques will be useful in understanding users more and eventually making emotional bond stronger. It is useful in improving branding strategies and enriching various interfaces. We know that there are gender differences and cultural differences so we will be able to design the products accordingly, keeping in mind who is the target audience. Some disadvantages are techniques like fMRI are expensive and it generates magnetic fields which can be harmful for the individuals. EEG and MEG are not as specific as fMRI. Facial expressions don't always tell the truth like brain signals does. Thus neuromarketing can bring an interesting transition in the field of marketing.

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Impact of Packaging of FMCG Products on Consumer Buying Behaviour

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Abstract:

The Objective of this research paper is to study impact of packaging of FMCG products on consumer buying behavior. This research is conducted in Pune city and a focus group methodology was used to understand consumer behavior towards FMCG products.

The challenge faced during the research was to incorporate packaging into an effective purchasing decision model, by understanding Consumer's behavior towards the packaging of FMCG products.

Due to increasing self-service in the stores when consumers search for and process information, the product's package can contain related and useful information for the consumer. Product packaging plays an important role in predicting consumer preference.

Apart from performing important role in marketing communication packages also deliver brand identification and label information like usage instructions, contents, and list of ingredients or raw materials, warnings for use and directions for care of product which in turn affects consumer buying behaviour.

Introduction:

"Packaging is the science, art, and technology of enclosing or protecting products for distribution, storage, sale, and use." Packaging of a product helps in improving the physical appearance of the product and includes the design, color, shape, labeling and materials used for packaging.

Earlier, packaging was considered as a meager protective tool but today it is considered as an important component of marketing. Nowadays packaging is often debated as the fifth 'P' of the marketing mix. Packaging plays important role in product positioning. Package design shapes consumer perceptions and can be the determining factor in point-of-purchase decisions which characterize the majority of shopping occasions. In recent past the marketing environment has become increasingly complex and competitive. A product's packaging is something which all buyers experience and which has strong potential to engage the majority of the target market. This makes it an extremely powerful and unique tool in the modern marketing environment. In addition to its benefits in terms of reach, some marketers believe that packaging is actually more influential than advertising in influencing consumers, as it has a more direct impact on how they perceive and experience the product.

"In most cases, the experience has been that pack designs are more likely to

 ISBN: 978-81-910118-7-6

influence the consumer perception of the brand." For products with low advertising support, packaging takes on an even more significant role as the key vehicle for communicating the brand positioning

Fast Moving Consumer Goods (FMCG), also known as Consumer Packaged Goods (CPG), are products that are sold quickly at relatively low cost. Though the absolute profit made on FMCG products is relatively small, they generally sell in large quantities, so the cumulative profit on such products can be large.

Examples of FMCG generally include a wide range of frequently purchased consumer products such as toiletries, soap, cosmetics and detergents as well as other non-durables such as glassware, light bulbs, batteries, paper product.. FMCG may also include pharmaceuticals, consumer packaged food products and drinks.

Some of the best known examples of Fast Moving Consumer Goods companies include: Parle, Nestle, Unilever, Procter & Gamble, Johnson & Johnson, COCA-COLA, Cavin Kare, and Amul.

Unlike other economy sectors, FMCG share float in a steady manner irrespective of global market dip, because they generally satisfy rather fundamental needs as opposed to luxurious needs.

Literature Review:

Suraj and Raveendran (2012) illustrated a situation confronting child and the parent when making a purchase decision at the checkouts for high impulse purchase categories namely chocolates using an Elaboration Likelihood Model approach. They explained the significance of packaging cues; pester power and the time pressure in bifurcation of the persuasive process into central and peripheral routes.

Bhavesh Parmar & Mitul Deliya (2012) has studies the "Role of Packaging on Consumer Buying Behavior – Patan District". The aim of this article is to get the A study to point towards role of packaging on consumer buying behavior. The basic purpose of this it is to find out how such factors are behind the success of packaging. The purpose of this research is to know the relationship between independent variable and dependent variables. The research is based in Patan District of Gujarat (India). The packaging is the most important factor. The consumer buying behavior is dependent on the packaging and on its features.

Packaging elements like Packaging color. Background Image, Packaging Material, Font Style, Design of wrapper, Printed Information and Innovation is taken as predictors. Due to increasing self-service and changing consumers' lifestyle the interest in package as a tool of sales promotion and stimulator of impulsive buying behavior is growing increasingly. So package performs an important role in marketing communications, especially in the point of sale and could be treated as one of the most important factors influencing consumer's purchase decision

Kotler (2003) distinguishes six elements that according to him must be evaluated when employing packaging decisions: size, form, material, color, text and brand.

Bed Nath Sharma Dec. 2008 studied New Consumer Products Branding, Packaging and Labeling in Nepal. This paper focuses on existing practice of branding, packaging and labeling of new products in consumer product manufacturing units. The study method was Descriptive presentation of facts collected through questionnaire survey concerned with different section of consumer new products (soap, biscuit, noodles, cigarettes and The study further investigates the new consumer product packaging and labeling status in manufacturing units. They are aware about the value of packaging and labeling. Majority of the consumer products 84.37% (27 out of 32 responses) are using product label as a simple tag attached to the product or an elaborately designed graphic that is part of the package.

Prendergast and Pitt (1996) review the basic functions of packaging, and define them by their role in either logistics or marketing. The logistical function of packaging is mainly to protect the product during movement through distribution channels. In the marketing function, packaging provides an attractive method to convey messages about product attributes to consumers at the point of sale. It may be difficult to separate these two package functions, as they are usually needed. The package sells the product by attracting attention and communicating, and also allows the product to be contained, apportioned, unitized, and protected.

Objectives of the Study:

- To study impact of packaging of FMCG products on consumer buying behavior.
- To find out whether Packaging Influence Consumer to switch from one to another Brand.
- To find out the Consumer Attitude towards the new Packaging of Preserved Products.

Research Methodology:

Research design specifies the methods and procedures for collection of requisite information and its measurements and analysis to arrive at certain meaningful conclusion at the end of the proposed study.

We conducted this research with the help of Questionnaire and from the initial stages, to the final designing of questionnaire; we conducted our research through exploratory research as well as Descriptive research.

Research Design:

- Universe of the study: Whole population of Pune city who visit retail outlets like Easy Day, Big Bazaar, D-Mart etc.
- Sample Size: Sample size of 150 Customers
- Sampling Technique: As no sampling frame of the population was available, samples for the study were chosen by using random sampling due to its time and cost feasibility. Interacted with the customers at random on one to one interaction to gain the information
- Data Collection: A structured questionnaire with rating scale is used to collect primary data

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- Statistical Tools Used: Z – test is used as a test to verify the different objectives

Tabulation and Data Analysis:

There does not exist significant difference between different attributes of packaging with regard to Consumer Behavior.

Level of significance 0.05 i.e. -1.96 to +1.96

Using Z-Test as Sample Size is Large

Z-Test for Proportions:

Table 1: Attributes of Packaging

Attributes	Low	High	% Low	% High
Ease	100	50	68%	32%
Brand Name	40	110	26%	74%
Visual	81	69	56%	44%
Information	75	75	50%	50%

Rating - High 1-2; Low 3-4

H01: There does not exist significant difference between convenient packaging of product with regard to consumer behavior

H02: There does not exist significant difference between brand name on packaging of product with regard to consumer behavior

H03: There does not exist significant difference between aesthetic components of packaging of products with regard to consumer behavior

H04: There does not exist significant difference between information it conveys on packaging of products with regard to consumer behavior. Similarly, like this in each case we reject or not reject hypothesis.

Reject the null hypothesis as Zcal > Ztab.

Not Reject the null hypothesis as Zcal < Ztab.

Attributes	Z – test value	Significant value (0.05)	Null hypothesis (H0)
Ease	15.17	1.96	Rejected
Brand name	9.47	1.96	Rejected
Visual components	0.99	1.96	Not Rejected
Information it conveys	0.80	1.96	Not Rejected

Interpretation: Since the calculated Z > tabulated Z in case of convenience and brand name this shows these attributes affects consumer behavior while other two cases aesthetic and information does not affect as significantly as the above two.

Consumer Priority towards Packaging:

Packaging influence consumer to buy a particular brand. In preserved products packaging plays a vital role. 44% consumer prefers long lasting fresher type packaging of preserved products.

Factors	Fre-quency	% percentage
Product Hygiene	30	20%
Good Product Condition	21	14%
Displaying appropriate information regarding ingredients	51	22%
Food Preservation	66	44%

Only 26% consumers switch from their brand as packaging changes where as 74% are not

Findings

67% Consumers are influence by Packaging and 33% are not Influenced

According to priority 24% prefer Protective Packaging, 16% Eco-friendly

Packaging, 28% Convenience Packaging & 32% agree for all

Brand name is highly rated with 74% and convenience is rated lowest with 68% in packaging of FMCG products.

In preserved products long lasting packaging is most important.

In aesthetic components:

- Material use is most preferred
- Shape, size &color are less preferred
- Text & graphics are least preferred

Only 26%of consumers are influenced by packaging while switching from one brand to another Brand.

Conclusion:

The research work has been successfully completed and it has helped us to understand the mindset of the consumers regarding the packaging of product and the ways in which packaging should follow to always retain and acquired the customers.

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ISBN: 978-81-910118-7-6

Sailing through Turbulent Economic Environment with Blue Ocean Strategy: A way out for Indian Healthcare Services Industry

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Abstract:

Globally, in general & India in particular are facing, tough & difficult economic environment, and all of us will need resolve of 'steel' to surmount the many challenges. World is passing through one of the most turbulent phases in History. We need to ask ourselves - are we helping create that fundamental transformation that will make a lasting difference to nation and society. We have seen India's GDP falling to a low of about 5%. The social costs of such a decline are worse than what our eyes see or are reported. After all we are talking about the quality of life of 1.2 billion people i.e. 1/7th of the current human race. The promised upturn will never come about unless we elevate our infrastructure and industry to the levels of our peer group of countries and without an accompanying focus on job creation for skilled and unskilled with some strategic approach. For example, China has also slowed down, but it still remains the fastest growing economy. While our domestic industry suffers several disadvantages due to the incidence of higher local taxes and duties, we are further disadvantaged due to exports support provided to Chinese manufacturers by their government and the artificially pegged Chinese currency. This results in idling capacities in India. Simultaneously new investments are drying up, worsening the situation further. We cannot and must not attempt to isolate and insulate ourselves from happenings around us, by saying that it does not concern us. If society were to fall, it would take everyone down with it. In order to contribute effectively, it is important to be focused and disciplined. We must make ourselves heard through a structured and disciplined manner to create a long term positive and progressive impact.

Introduction:

Blue Ocean Strategy: Concept Meaning & formulation of Strategy

The metaphor of red and blue oceans describes the market universe. Red oceans represent all the industries in existence today – the known market space. In the red oceans, industry boundaries are defined and accepted, and the competitive rules of the game are known. Here companies try to outperform their rivals to grab a greater share of product or service demand. As the market space gets crowded, prospects for profits and growth are reduced. Products become commodities or niche, and cutthroat competition turns the ocean bloody; hence, the term red oceans.

Blue oceans, in contrast, denote all the industries not in existence today – the unknown market space, untainted by competition. In blue oceans, demand

 ISBN: 978-81-910118-7-6

is created rather than fought over. There is ample opportunity for growth that is both profitable and rapid. In blue oceans, competition is irrelevant because the rules of the game are waiting to be set. Blue Ocean is an analogy to describe the wider, deeper potential of market space that is not yet explored. The cornerstone of Blue Ocean Strategy is 'Value Innovation'. A blue ocean is created when a company achieves value innovation that creates value simultaneously for both the buyer and the company. The innovation (in product, service, or delivery) must raise and create value for the market, while simultaneously reducing or eliminating features or services that are less valued by the current or future market. The authors criticize Michel Porter's idea that successful businesses are either low-cost providers or niche-players. Instead, they propose finding value that crosses conventional market segmentation and offering value and lower cost.

Blue ocean strategy vs. red ocean strategy

Kim and Mauborgne argue that while traditional competition-based strategies (red ocean strategies) are necessary, they are not sufficient to sustain high performance. Companies need to go beyond competing. To seize new profit and growth opportunities they also need to create blue oceans.

The authors argue that competition based strategies assume that an industry's structural conditions are given and that firms are forced to compete within them, an assumption based on what academics call the structuralist view, or environmental determinism. To sustain them in the marketplace, practitioners of red ocean strategy focus on building advantages over the competition, usually by assessing what competitors do and striving to do it better. Here, grabbing a bigger share of the market is seen as a zero-sum game in which one company's gain is achieved at another company's loss. Hence, competition, the supply side of the equation, becomes the defining variable of strategy. Here, cost and value are seen as trade-offs and a firm chooses a distinctive cost or differentiation position. Because the total profit level of the industry is also determined exogenously by structural factors, firms principally seek to capture and redistribute wealth instead of creating wealth. They focus on dividing up the red ocean, where growth is increasingly limited. Blue ocean strategy, on the other hand, is based on the view that market boundaries and industry structure are not given and can be reconstructed by the actions and beliefs of industry players. This is what the authors call "reconstructionist view". Assuming that structure and market boundaries exist only in managers' minds, practitioners who hold this view do not let existing market structures limit their thinking. To them, extra demand is out there, largely untapped. The crux of the problem is how to create it. This, in turn, requires a shift of attention from supply to demand, from a focus on competing to a focus on value innovation – that is, the creation of innovative value to unlock new demand. This is achieved via the simultaneous pursuit of differentiation and low-cost. As market structure is changed by breaking the value/

cost tradeoff, so are the rules of the game. Competition in the old game is therefore rendered irrelevant. By expanding the demand side of the economy new wealth is created. Such a strategy therefore allows firms to largely play a non–zero-sum game, with high payoff possibilities.

The four formulation principles address how an organization can create blue oceans by looking across the six conventional boundaries of competition (Six Paths Framework), reduce their planning risk by following the four steps of visualizing strategy, create new demand by unlocking the three tiers of noncustomers and launch a commercially-viable blue ocean idea by aligning unprecedented utility of an offering with strategic pricing and target costing and by overcoming adoption hurdles. How to break out of traditional competitive (structuralist) strategic thinking and to grow demand and profits for the company and the industry by using blue ocean (reconstructionist) strategic thinking is the main crux. The four principles are:

1. how to create uncontested market space by reconstructing market boundaries,
2. focusing on the big picture,
3. reaching beyond existing demand and
4. getting the strategic sequence right.

The third and final part describes the two key implementation principles of blue ocean strategy including tipping point leadership and fair process. These implementation principles are essential for leaders to overcome the four key organizational hurdles that can prevent even the best strategies from being executed. The four key hurdles comprise the cognitive, resource, motivational and political hurdles that prevent people involved in strategy execution from understanding the need to break from status quo, finding the resources to implement the new strategic shift, keeping your people committed to implementing the new strategy, and from overcoming the powerful vested interests that may block the change.

The "Blue Ocean Strategy" tries to align innovation with utility, price and cost positions. With Blue Ocean Strategy both differentiation and lower costs are achievable simultaneously. Neither the company nor the industry is the best unit of analysis of profitable growth; rather it is the strategic move that creates "Blue Ocean" and sustained high performance. This creates uncontested market space and makes competition irrelevant.

Research Methodology:

Type of Research

Qualitative Descriptive

Hypothesis

There is wide scope, cross border markets available for Indian healthcare industry to explore

Objective

To study the relevance of applicability of the Blue ocean strategy as a global strategy for Indian healthcare sector to explore right Blue Ocean markets.

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Type of Data Collection

Secondary & syndicated data

Data Analysis

Blue ocean strategy in Healthcare Industry

The Asia Pacific region accounted for over 60.0% of the world's population and around 36.0 % of the world's GDP in 2011.

The region which is witnessing unprecedented population growth, an increasingly ageing population, higher purchasing power and affluence will continue to drive greater investment in healthcare infrastructure in the future.

Given the rapid economic growth in the region, the total healthcare expenditure is expected to reach USD 919.6 billion by 2015 from USD 631.2 billion in 2012, a CAGR of 13.9%.

Healthcare Industry – India

The Indian healthcare market size was estimated at USD78.6 billion in the year 2012, and is expected to reach USD119.6 billion by 2015, reflecting a CAGR of 15.0% over this period.

Out of the total Indian healthcare market in 2010, approximately 70% comprises healthcare delivery services, 20% comprises the pharmaceutical market and the remaining comprises medical technologies and other components.

As per WHO 2012 report, India's expenditure on healthcare as a percentage of GDP has increased from 4.0% in 2007 to 4.2% in 2011.

Currently, India Accounts for nearly 6% of the world hospital beds and shares 20% of the world's disease burden.

The Indian healthcare delivery system is characterized by two major components public and private. The Government i.e. public healthcare system comprise limited secondary and tertiary care institutions in key cities while focusing on providing basic healthcare facilities in the form of Primary Healthcare Centers (PHCs) in rural areas.

The private sector provides the majority of secondary, tertiary and quaternary care institutions with a major Concentration in metros, super metros and tier I cities.

In terms of medical expenditure, approximately 66.0% of the expenditure was catered by private hospitals in 2010. Out of this, nearly 10.0% of private healthcare services were catered by corporate hospitals. The remaining private healthcare services are provided by the unorganized sector i.e. trust-owned or owned and run by individual doctors or group of a few doctors.

(Source: Frost & Sullivan Independent report on the healthcare Industry in the Asia Pacific region, 17 September 2012)

Key Growth Drivers for Healthcare Industry in India

Growing Population

According to the Indian census, the population of the country was estimated at 1.2 billion in 2011 and is expected to reach 1.3 billion by 2015. The rise in population will have a direct correlation to the increasing demand for healthcare services at hospitals, in particular in relation

to preventive healthcare, treatment of lifestyle diseases, super specialty care and diagnostic services. In addition, the increase in geriatric population due to increase in average life expectancy, will also lead to a rise in demand for healthcare services.

Higher Literacy Rate

The Indian census estimates the literacy level in the country to having increased by 9.2 % in the past decade reaching 74.0% in 2011. With an increasing national literacy rate and the availability of information on the internet, journals, various interactive forums and regional magazines, there is a rapid increase in awareness about healthcare services across all age groups. Such increase in awareness related to healthcare issues and diagnosis, coupled with higher incomes, is expected to increase patient volumes from primary to secondary or tertiary healthcare services.

Increasing Upper Middle Class Segment

The economy is driving urbanization and expanding the middle class population, with more disposable income to spend on healthcare. This is expected to increase awareness of health related issues and will result in patients likely to increase their discretionary spend

(Source: Frost & Sullivan Independent report on the healthcare Industry in the Asia Pacific region, 17 September 2012)

By 2030, India is expected to surpass China to become the world's biggest population. In 2010, nearly 63.6 % of the population was in the age group of 15- 64 years. Moreover, there has been a gradual increase in life expectancy over the last decade to an estimated 70.6 years in 2010 up from 57.0 years in 1990. The changing demographics and increasingly sedentary lifestyle of the population is set to increase the healthcare spend in India. The household expenses towards healthcare are expected to rise from 7.5% in 2005 to 10.0% by 2015. Currently, nearly 70.0- 80.0% of healthcare spending including spending on pharmaceuticals is an out-of-pocket expense as only 15.0-20.0% of the population has health insurance.

Key healthcare service infrastructure statistics

India has a ratio of 0.9 beds per 1,000 people as compared to China, Malaysia and Singapore with ratios of 4.2, 1.8 and 3.1 beds per 1,000 people, respectively. In order to reach the WHO recommendation of 4.0 beds per 1,000 people, the country needs to add approximately 3.7 million beds as of 2011 with an investment of nearly USD 187.5 billion. (Source: Frost & Sullivan Analysis)

India has a ratio of 0.5 doctors and 1.3 nurses per 1,000 people as compared to the global average of 1.4 doctors and approximately 2.8 nurses per 1,000 people in 2010. Against the global average, this translates into a gap of nearly 1.0 million doctors and 1.8 million nurses as of 2010.

On healthcare in the future, especially on preventive healthcare.

Such a trend is likely to favor private healthcare delivery practitioners, which are well positioned in secondary and tertiary care services.

 ISBN: 978-81-910118-7-6

Robust Demand from Corporate Employers

There is an increasing demand for healthcare management plans (comprising preventive health check-up packages and treatment for employees). This demand is largely being catered to by private healthcare sector players. With such health plans coupled with preventive wellness initiatives offered as benefits to employees by an increasing number of employers, this segment is expected to provide a strong impetus to growth.

Rising Lifestyle Diseases

According to WHO and the World Economic Forum, the income loss to India because of lifestyle diseases and is projected to reach USD 54 billion by 2015. This will result in an increase in average revenue per treatment at hospitals as treatment of lifestyle diseases such heart diseases and cancer provide higher revenues to hospitals and will likely result in hospitals assuming a greater share of the healthcare market.

Medical Tourism

The Indian medical tourism industry is expected to top the USD 2 Bn mark by 2015. In India, the medical tourism patient inflows are mostly from the Middle-Eastern and African nations. However the substantially lower cost, comparable or better infection rates and long waiting periods in developed nations are prompting several citizens from such nations to also visit India for elective treatments as well as critical conditions.

The factors driving medical tourism are the increasing adoption of sophisticated medical technology, rising affluence of the middle income class seeking quality medical care, availability of skilled doctors and paramedical staff and willingness of patients to travel to access specialized treatment not available in their own country.

Health Insurance

The Indian Healthcare Insurance market is currently at a nascent stage and represents a key growth driver in the Indian healthcare market. The health insurance market continues to be the fastest growing segment in the general insurance industry in India. Health insurance is making healthcare more affordable to a larger segment of the population and is also boosting healthcare expenditures per household. The health insurance market was nearly 3.0% of the total Indian healthcare market size in 2010 and reached nearly 240-250 million people. The market is expected to continue expanding with an increase in insurance coverage. Total insurance premiums are expected to reach USD 6.1 billion by 2015 from USD 1.8 billion in 2010, at a CAGR of 27.0%, which will result in higher insurance coverage in the future. In 2011, insurance paid nearly 10.0% of all hospitalization expenditures in the country. The increasing penetration of healthcare insurance coupled with various government initiatives to promote healthcare insurance coverage will see a further boost in revenues for private healthcare organizations.

Trends in Healthcare Industry in India

Rising Demand in Tier 2 and 3 Cities

With increasing purchasing power, there is a rising demand for high-quality and specialty healthcare services in tier 2 and

3 cities providing a significant opportunity to private players as the healthcare setup in these cities requires a relatively lower amount of investment and hence result in a faster breakeven.

Government Incentives:

The Government of India is encouraging corporate hospitals to utilize their capabilities in managing a quality setup. Private sector intervention has become imperative to enhance the efficiency of systems by providing core competencies in operations, technology, funding and technical expertise. This provides an additional revenue stream to private players.

Innovative delivery models:

Traditionally, hospitals have been considered to be capital-intensive businesses with long gestation or break-even periods. The private sector market players are exploring different delivery models such as setting up day care centers and single specialty hospitals. These have comparatively lower capital requirements and therefore shorter breakeven periods.

Government Initiatives to Promote Private Healthcare:

The Government of India has taken numerous steps to promote private healthcare sector in India by providing various subsidies and incentives to motivate private players to invest in the healthcare market. These include various direct and indirect tax benefits, subsidized land, and accounting benefits in the form of higher depreciation and PPP initiatives which range from super specialty care hospitals to community health insurance schemes.

The Indian Diagnostics Industry

The Indian Diagnostics market is largely unregulated and highly fragmented contributing approximately 3.6% of the overall healthcare market in India. It comprises primarily of clinical pathology, imaging and radiology. The sector in India is expected to grow at a CAGR of 28.0% to approximately ` 254.4 billion by 2015. The pathology and imaging and radiology segments are expected to grow to approximately 180.0 billion at a CAGR of 28.0% and ` 74.0 billion at a CAGR of 27.0%, respectively. It is estimated that diagnostic test results impact between 60.0% - 70.0% of medical treatment decisions and hence form an essential element in the delivery of effective healthcare services. Approximately 10% of the diagnostic market in the country comprise corporate chains that usually operate under a "hub-and-spoke" model, with reference laboratories in one or more key cities, a defined catchment area of surrounding towns and localities and collection centers or pick up points from healthcare centers such as hospitals or nursing homes. Under this model, franchisees also supplement underserviced or highly profitable but localized areas. This model allows a corporate chain to leverage its brand recognition across larger areas, covering major cities and towns

(Source: ICRA Management Consulting Services Limited, Indian Diagnostic Services Market Report, January 2011.).

Other select markets in Asia Pacific: Hong Kong

The Hong Kong healthcare industry is fairly regulated and characterized by both public and private sector participation. The

 ISBN: 978-81-910118-7-6

industry is projected to grow at a CAGR of 6.2% to USD 19.8 Bn by 2015 from USD 13.9 Bn in 2010, a relatively lower growth as compared to the healthcare industry in emerging economies in Asia. The key growth drivers include increasing disposable income, ageing population, growing incidence of lifestyle related diseases, rising private insurance and a higher private spend on healthcare. The industry also faces challenges in terms of supply shortage of medical doctors and nurses and high property prices that restrict the setup of large healthcare infrastructure in the country. In order to meet the requirements of providing adequate healthcare facilities & services, the government is opening capacity in the private sector to assist in creating more healthcare infrastructure, primarily private hospitals. Further in order to strengthen primary healthcare services, the government is enhancing public private partnerships and focus on improving the percentage of private insurance which would increase the demand for primary care. Companies that will have an end to end presence in the healthcare value chain i.e. from primary care to diagnostic to healthcare / hospital facilities would be well placed to capture the opportunity in the healthcare space in the country.

Singapore

Singapore is one of the wealthiest countries with per capita GDP amongst the highest in the Asia Pacific region. The overall healthcare expenditure constitutes 4% of the country's GDP. The industry comprises both public and private healthcare systems, wherein the key components of healthcare, i.e. primary care services, are being undertaken largely by the private practitioners (approximately 2,000), and hospital services are dominated by the public system. The key drivers of growth include the ageing population, rising disposable incomes, an influx of non-residents that rely solely on private insurance; a medical tourism industry that is experiencing strong growth; and the existing high burden on the public healthcare system. The Singapore Government ensures affordability, largely through compulsory savings, subsidies, price controls and runs various disease prevention programmes.

Discussion & Conclusions:

Strategic Direction

1) Sharper and stronger focus in geographies and verticals which are better strategic fits and present relatively stronger growth opportunities.

2) To evaluate to ensure the right strategic alignment into sharper focus markets like India which offer vast growth opportunities.

3) The Growth driver : The role of private healthcare organizations has significantly increased over the last decade in delivering quality healthcare services. Emerging economies such as India are undergoing a transformation with an increasing demand for high quality healthcare delivery services as a result of burgeoning population and increasing chronic & lifestyle disease ailments. Higher literacy levels and insurance penetration coupled with rising per capita income will

add to the need for advanced and modern treatment options in world class healthcare facilities. This will see private players playing a larger role in bridging the demand supply gap in the industry. Healthcare organizations will continue to explore different business models to grow their presence rapidly and with a judicious capital allocation mix. With unending pressure on the public healthcare systems, the governments of many countries have also recognized that private investments in the sector through public private partnership models will have to play a much wider role enabling them to provide quality and affordable healthcare delivery services to its citizens.

4) Risks and Challenges:

Innovative Business Models: The healthcare sector is a capital-intensive sector with the long gestation and payback periods of the project. Many healthcare providers are exploring and moving towards innovative and asset light business models such as lease arrangements, management contracts and business trusts wherein the capital expenditure by the healthcare provider is reduced significantly. Such models if successfully implemented will help healthcare providers to further strengthen focus on their core competency of providing medical services.

5) Shortage of Healthcare Professionals: For emerging economies like India, the healthcare and education services infrastructure requires substantial investments to reach the recommended levels by world healthcare bodies and meet the growing demand for healthcare services & healthcare professionals in the region. Governments in many emerging economies such as India need to proactively address this huge shortage in infrastructure and manpower by adopting public private partnership models.

6) Scope: Medical Services and Specialties: The region is witnessing a shift in diseases patterns mainly towards the non-communicable diseases, which are caused by environmental degradation, lifestyle changes (especially in the middle-high income groups) and the rapid ageing population. Healthcare budgets will continue to be under tremendous pressure due to the requirement of sophisticated and capital intensive treatment. The spectrum of services being offered by healthcare providers have broadened to preventive, diagnosis, intervention, recovery, rehabilitation and patient management. In terms of treatment, private healthcare providers have broadened their horizons from acute to chronic to preventive and specialized care.

7) All above clearly indicates a vast marketing scope across various models. At some places it could be Red ocean markets but with majority Indian healthcare sector has got, many advantages to strategize as per blue ocean strategy for sustainable growth, risk diversification.

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Packaging: Your Salesman on the Shelf

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Abstract:

The study is intended to measure the impact of packaging and labeling on retailers and consumer buying behavior. Further it also investigates the mediation of brand image for the relationship of packaging and labeling with consumer buying behavior. Study was carried out with the help of statistical analysis of data obtained from questionnaire. Study revealed the importance of buyer attraction in package design and unimportance of environmental considerations. Similarly customers are more likely to give weightage to branded product than to the package and shape of package is the significant attribute of communication through product packaging.

Key Words: *Brand communication, Brand Image, Buyer attraction, Marketing Mix, Package Design, Packaging.*

Introduction:

Products are always protected by packaging which is a material around the product to protect it from any sort of damages, contain information about the brand, quality and how to use that product is known as packaging. According to previous studies (Bloch, 1995: Madden, Hewett & Roth, 2000; Underwood et al., 2001;, Silayoi & Speece, 2004; Silayoi & Speece, 2007; Butkeviciene, Vila & Ampuero, 2007; Stravinskiene & Rutelione, 2008) attraction towards the packaging is more to be seen in young generation due to several reasons. Consumers of all ages are involved in the category of consumers, who get attracted to the products due to its packaging, but young generation particularly of age group of 17-30 years old males and females consumers to get approximate results. According to Rundh (2005) packaging has a great impact as far as brand is concerned, and people are more attracted because of the brand and they got a perception about a product in advance. Packaging is also used for the marketing of that product. It is actually one of the most important marketing tools for any product. Labeling give message to consumer that the product have those kinds of features you want and I am best from the other brands of the same products. (K,Rita 2009). Sometimes labeling and packaging make in a very good manner that consumer think that he or she really needs that kind of product. Many consumers think that this product doesn't have seen before and so many questions are raised at the time of purchasing like the quality of product, it may have some side effects. Labeling is anything written on the packaging or product or

 ISBN: 978-81-910118-7-6

anything else ranging from simple tag or a designed graphics. It is possible that a label only contain brand name of the product or it could contain all the information about the ingredients and use of the product (Kotler, 2001).

According to the FDA (1998), a label of the product must contain at least brand name of the product, ingredients, its manufacturer's name and address, net weight and other nutrition facts about the product. If label of the product is not in a proper way or not clear to the consumers then there is possibility that consumer will not purchase that type of product. Many companies use packaging and labeling as a tool to attract the buyers towards the product and to increase their sales. (Butkeviciene et al. (2008). People are ready to pay more for the products who have good brand name as compare to those products which don't have good brand image. For the success of any organization brand name is very important, (Randall 1997). Authors believe that in this age of globalization and competition role of brand is imperative to increase the market share.

Problem Statement:

The study is to investigate the role of packaging and labeling on retailor and consumer buying behavior.

Objectives of Study

1. To explore the relationship of labeling and packaging on retailor and consumer buying behavior.
2. To explore that if brand image mediates the relationships of packaging on consumer buying behavior.
3. To explore that if brand image mediates the relationships of labeling on retailor and consumer buying behavior.
4. To explore the impact of all above said relationships.

Practical Implications:

The study would help to understand the exact role of the packaging and labeling with respect to consumer buying behavior. Accordingly marketers may choose the strategies. The role brand image is also being considered so marketers would come to know that how long brand image is creating the impact on consumer decisions while they are taking packaging into consideration.

Review of literature:

Packaging is used to communicate with the consumer (Butkeviciene et al. (2008). Packaging is the only thing that communicate a message about the product to buyer in the store" (Gonzalez et al., 2007). It is used to protect the product from damages during shipping and transferring product from one place to another (Wells et al,2007). Consumers are sensitive and don't want such packaging which carries germs or infections as consumers are used to check/evaluate it by appearance of the products and ensuring the quality of the product before making a purchase decision (Grundvag & Østli, 2009).

According to Kotler (2001) "A label might carry only the brand name or a great deal of information". Before purchase consumer seeks the information and

one of the sources of such information is label particularly in nutrition (Caswell and Padberg, 1999). The color, style, design and other interesting material as a label not only distinguishing the brand form other competing brands but also increase the likelihood of purchase (Rocchi and Stefani, 2005). Consumers are interested in the authenticity of the product before the purchase which is defined as "the fact being original" (Mc Leod, 1999). Olson and Jacoby, (1973) identified the label as an extrinsic cue that is an attribute not included in the physical products. Label could create the authenticity in the product by providing such information as quality, specification, ingredients etc. (Halewood and Hannam, 2001; Marianna, 1997). Keller, (1993) defined that brand image refers to a particular frame of reference by which the consumer is associating a particular brand. A good image enhances the value of the brand in the eyes of the consumer by increasing its likeability/desirability and differentiating it from other competing brands (Hsieh, Pan, and Setiono, 2004). The outcome of the favorable image is the increase in loyalty, equity, cosumer buying behavior and overall performance of brand (Koo, 2003; Keller, 1993: Hsieh et al., 2004, Roth, 1995). Brand image is measured in terms of benefits a brand is offering or some attributes the brand is having or the usage of the brand (et al., 2001; Malhotra's 1981; ; Roth, 1995).

Consumer behavior includes the number of processes, stages of decision making, and activities in which customer/ consumer make decision of buying, using and disposing off the products after usage or fulfillment of needs (Blackwell et al. 2006). Consumer behavior is a decision making process in which people make their purchase and other decisions keeping in view the available resources which are efforts, time and money (Schiffman and Kanuk, 2000). The decision is based on consumer preferences and consumer has his/her own preferences which may differ from each other (Blackwell et al., 2006). As brand name or image increases the value of the brand in the eyes of the customers so they are purchasing a particular brand again and again (Gabbott and Hogg, 1998).

How Packaging Can Influence Consumer Buying Behavior:

Together with promoting, pricing and advertising, packaging is one of the main marketing strategies used by companies in order to sell their products. Put the same quantity of one product in two boxes, one a plain white cardboard box and the other one in an attractive, colourful box, position them side by side on a supermarket shelf and sell them at exactly the same price, guess which one will sell? This is a simplified example to show you that packaging does influence customer behavior. Marketers must carefully study consumers and if they want a product to be successful, adapt the packaging to their target consumers: you can have equally attractive packaging that will appeal differently to different kinds of consumers. A child will go for a popular cartoon character on a cereal box while a mother will more likely buy a product which is clearly labeled as being nutritional (which can cause family frictions in the weekly

 ISBN: 978-81-910118-7-6

undertaking of grocery shopping). It is also important to consider the quantity in which to pack a product: if you target older people who are likely to be living alone or in couple, sell them a product that is packaged in small quantities: they will be more likely to buy a pack of 2 slices of ham than a bargain bumper-pack that will probably go out of date before they get to eat it all. Practicality of use is also important: the mother of young children will choose a product that is easy to open for her children's lunch-box, whereas a bachelor won't mind if a jam-jar is difficult to open. There are a lot of variables to consider when deciding on the right packaging for a product and the main thing for a company to remember when choosing a package is that it must be adapted to consumer's needs.

Package Design:

Consumer packaging serves to contain and communicate. A product's "packaging mix" is the result of several requirements that determine how a package accomplishes those two basic functions. Robert D. Hisrich identified eight major package requirements that dictate the mix. A package must: protect the product, be adaptable to production-line speeds, promote or sell the item, increase the product's density, help the consumer use the product, provide reusable value to the user, satisfy legal requirements, and keep packaging-related expenses low. Two classes of package design criteria are functional requirements and sales requirements.

Functional Requirements:

Package design must meet five groups of functional criteria:

1. In-home,
2. In store (or warehouse)
3. Production
4. Distribution and safety
5. Legal

Home requirements:

Dictate that packaging be convenient to use and store, remind users when and what to repurchase, reinforce consumers' expectations of the product, and tell them how to safely and effectively use the product. In addition, increasing numbers of consumers expect packaging to be recyclable and environmentally sensitive.

In-store criteria:

Packaging attract attention on the shelf, instill confidence in the buyer, identify the product or brand and differentiate it from the competition, communicate benefits and uses, and entice customers to actually purchase the item. The product must also be easy for retailers to store and stock on the shelves or the floor, and simple to process at a check-out counter or other final point of distribution. For instance, packaging that is oddly shaped and takes up a large amount of space may draw attention, but it may also be shunned by mail-order sellers concerned about shipping costs or by space-conscious store retailers.

Production demands:

Functional criteria influencing packaging are primarily based on cost. A designer may create a fantastic package that would perform excellently in the

marketplace, but if the company cannot find a way to produce the package cost-effectively, the design is useless. Among the most important considerations in this realm is production line speed. If a container is too long, wide, or short, it could significantly slow the speed of the production machines. Similarly, if the top or spout of a container is too small or is oddly shaped, the product may not flow easily into the package.

Distribution and safety:

If an unacceptable portion of the goods are damaged during storage, transportation, or distribution, the package has failed. Likewise, if the package injures the user, future sales could be lost or the company could be liable for damages. As a result, packaging engineers face numerous technical considerations that have a residual impact on the final look and feel of the package. For instance, packages must be able to withstand the pressure of several other crates stored on top of them. They must also be able to resist moisture, adapt to temperature changes, and withstand rough handling. From a cost standpoint, packages must also be designed to suit standardized transportation requirements related to weight, size, and durability. Finally, they should be designed so that the bar code on the package is easily scanned. Furthermore, packages should ideally be designed to handle normal use by consumers. Examples of packages that may result in harm to consumers include: those with sharp edges, such as some pull-top canisters; glass containers; and heavy item boxes which might break when the consumer is carrying them cause strain or injury to the consumer when picked up or set down.

Laws and legislation:

Various laws have been passed to protect consumers from misrepresentation and unsafe products. For instance, some laws require that potentially dangerous goods, such as gasoline or drugs, be stored in specially constructed containers. Other laws forbid producers from misrepresenting the quality or quantity of a product through misleading packaging. Perhaps the most influential class of laws that affect packaging, however, is that related to labeling.

Product Labeling:

The label is the text printed on a product package or, in the case of items like clothing, attached to the product itself. Legally, labels include all written, printed, or graphic material on the containers of products that are involved in interstate commerce or held for sale. The main body of legislation governing packaging and labeling is the Fair Packaging and Labeling Act of 1966. It mandates that every product package or label specify on its “principal display label” (the part of the label most likely to be seen by consumers) the following information:

1) The product type
2) The producer or processor’s name and location
3) The quantity (if applicable)
4) The number and size of servings (if applicable).

 ISBN: 978-81-910118-7-6

Furthermore, several restrictions apply to the way that the label is displayed. For example, mandatory copy required by the act must be in boldface type. Also, if the company is not listed in the telephone book, the manufacturer's or importer's street address must be displayed.

Other information required by the act relates to specific foods, toys, drugs, cosmetics, furs, and textiles. For instance, under the act labels for edible products must provide sodium content if other nutritional information is shown. They must also show ingredients, in descending order from the one of highest quantity to the one of least quantity. Certain food items, such as beef, may also be required to display qualitative "grade labels" or inspection labels. Likewise, "informative labeling" may be required for products such as home appliances. Informative label requirements mandate information about use, care, performance capability, life expectancy, safety precautions, gas mileage, or other factors. Certain major home appliances, for example, must provide the estimated cost of running each make and model for one year at average utility rates.

US government has passed significant new labeling legislation, the Nutrition Labeling and Education Act of 1990, which became effective in the mid-1990s. This act is intended primarily to discourage misleading labeling related to health benefits of food items. Specifically, many package labels subjectively claimed that their contents were "low-fat," "high-fiber," or possessed some other health virtue when the facts indicated otherwise. Basically, the new laws require most food labels to specify values such as calorie and cholesterol content, fat and saturated fat percentages, and sodium levels.

Sales Requirements:

In additional to functional requirements, product packaging must be designed in a way that will appeal to buyers. The four principal merchandising requirement areas are:

1. Apparent size.
2. Attention drawing power.
3. Impression of quality.
4. Brand-name readability.

Apparent size:

It entails designing packaging to look as large as possible without misrepresenting the actual contents. This objective can be achieved by ensuring that the panels or dimensions of the package most likely to be viewed by the consumer are the largest, and that the product or brand name is shown on the most visible areas in large letters. In addition, the package can be made to look larger by using solid colors and simple, bold designs free of borders, superfluous art work, and unnecessary print. The pretense of largeness is particularly important for packages containing commodity items, such as rice, driveway salt, and canned fruit or vegetables.

Attention drawing power:

Depending on the product and the goals of the marketers, the package may be made to appear attractive, exciting, pure,

soft, scary, intriguing, or to evoke some other emotion. In most cases, though, the product is displayed on the front of the package in the form of a picture, art, or see-through window. In addition, bright colors, glossy stock, obtrusive carton displays, and other elements can garner positive attention if used prudently.

Quality impression:

Important sales requirement for packaging because items that are perceived to be of low quality are usually assumed to be a poor value, regardless of price. Examples of packaging mistakes that convey low quality or poor value include: faded lettering or colors, tacky designs or strange typeface, outdated pictures and designs, and cheap construction.

Readability:

It is the basic sales requirement for successful package design. This element is of paramount importance for products like breakfast cereal that are shelved next to several competing brands and products. If the package attempts to convey too many messages, it will likely fail to connect with the consumer. Because of the mass of buying choices, buyers typically do not take time to absorb messages on packaging, with the possible exception of high-priced specialty items. Among other guidelines, letters or logos should be large and printed in the same type style as that used in complementary print and television advertising. The requirement of readability contributes to the difficulty in packaging completely new products.

Packaging Strategy:

One of the most critical roles for packaging is promoting products. Indeed, just as ease-of-use and readability are elements of the strategic packaging mix, packaging is an important part of a company's strategic marketing mix. Most packages for consumer products are designed for one of three purposes:

1) To improve the packaging of an existing product
2) To add a new product to an existing product line
3) To contain an entirely new product.

Time pressure:

Time pressure frequently affects shopping decisions. Participants agreed that when shopping under relatively high time constraints, they spend less time making any given purchase. They described shopping under time pressure as making quick decisions without careful evaluation.

This made them purchase fewer products than intended and led to unplanned purchases. It was more difficult to make decisions, especially when considering multiple brands or product attributes. They made most decisions quickly at the point of sale.

Research Framework:

Pursuing the aim of this study, the importance of various visual and verbal elements of package for consumer„s decisions was surveyed in literature. When all functions and environments are considered simultaneously, packaging becomes a socio-scientific endeavor. When viewed this way,

 ISBN: 978-81-910118-7-6

packaging is not just a means to protect or contain the product, but has the potential to impact the decisions of consumers, and the lives of those interfacing with it. Researchers have synthesized this concept into a tool referred to as —The Packaging Matrix. Based on the careful investigation of available literature the study would circle around the following framework.

Research Methodology:

In the current study work after exhaustively surveying the literature above framework was devised. In the above framework the dependent and independent variables were jotted down and the questionnaire involving dependent and independent variables was administered to the representative set of population. And the data collected through survey was analyzed by using multiple regression analysis. The questionnaire was rated on the five point Likert scale. The ratings of questionnaire ranged from strongly agree to strongly disagree. The strongly disagree was allotted the scale of 1 and strongly agree was allotted the scale of 5. The respondents were asked to fill the questionnaire which involved 20 parameters that comprised package design, liking of package, communication through package and usability of package. The questionnaires were administered online as well as to seek responses.

Sampling Design:

Sampling Population: Sampling population consisted of the different users of packaging who use the packaging in their day to day life.

Sampling Elements: Individual respondents were the sampling elements.

Sampling Size: 103 respondents for questionnaire

Data Collection:

Self-designed questionnaires were administered to gauge the preferences of respondents. The questionnaires were rated on the 5 point Likert scales with 1 for strongly disagree and 5 for strongly agree.

Tools used for Data Analysis:

Following tools were used for data analysis:

a) Reliability test to measure the reliability of questionnaire.

b) Multiple regression analysis

- Using reliability analysis one can determine the extent to which the items in the questionnaire are related to each other and we can get the overall index of repeatability or internal inconsistency of a scale as a whole. Also we can identify the Problem items that should be excluded from the scale. Alpha reliability test of the administered questionnaire was carried out. Alpha (Chronbach) is a model of consistency based on average inter-item correlation.
- Multiple regression analysis was used to find out the statistical relationships existing between dependent and independent variables. From the framework of research following dependent and independent variables were identified.

- Packaging design is dependent upon the buyer attraction towards a package, communication to the buyer, convenience in handling and using, salability of product and green aspect.

Hypotheses for relationships between package design and buyer attraction, communication to the buyer, convenience in handling, salability of product, green aspect.

H0: Significant linear relationship does exist between package design and buyer attraction.

H1: Significant linear relationship exists between package design and buyer attraction

H0: Significant linear relationship does not exist between package design and communication to the buyer

H1: Significant linear relationship exists between package design and communication to the buyer.

H0: Significant linear relationship does not exist between package design and convenience in handling.

H1: Significant linear relationship exists between package design and convenience in handling.

H0: Significant linear relationship does not exist between package design and salability of product.

H1: Significant linear relationship exists between package design and salability of product.

H0: Significant linear relationship does not exist between package design and green aspect.

H1: Significant linear relationship exists between package design and green aspect.

Hypotheses for relationships between liking for package and brand country of origin, colour connotation, symbol connotation and size.

H0: Significant linear relationship does not exist between liking for package and brand

H1: Significant linear relationship exists between liking for package and brand

H0: Significant linear relationship does not exist between liking for package and country of origin.

H1: Significant linear relationship exists between liking for package and country of origin.

H0: Significant linear relationship does not exist between liking for package and colour connotation

H1: Significant linear relationship exists between liking for package and colour connotation

H0: Significant linear relationship does not exist between liking for package and symbol connotation

H1: Significant linear relationship exists between liking for package and symbol connotation

H0: Significant linear relationship does not exist between liking for package and size

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H1: Significant linear relationship exists between liking for package and size

Hypotheses for the relationships between communication through the package and independent variables like information, shape, brand image and symbols/logos.

H0: Significant linear relationship does not exist between communication through the package and information.

H1: Significant linear relationship exists between communication through the package and information.

H0: Significant linear relationship does not exist between communication through the package and shape.

H1: Significant linear relationship exists between communication through the package and shape.

H0: Significant linear relationship does not exist between communication through the package and brand image.

H1: Significant linear relationship exists between communication through the package and brand image.

H0: Significant linear relationship does not exist between communication through the package and symbols/logos.

H1: Significant linear relationship exists between communication through the package and symbols/logos.

Hypotheses for the relationship between usability of package and ease of handling, disposability and protection.

H0: Significant linear relationship does not exist between usability of package and ease of handling.

H1: Significant linear relationship exists between usability of package and ease of handling.

H0: Significant linear relationship does not exist between usability of package and disposability

H1: Significant linear relationship exists between usability of package and ease of disposability

H0: Significant linear relationship does not exist between usability of package and protection

H1: Significant linear relationship exists between usability of package and protection.

The above listed hypotheses are tested for their level of significance for the acceptance and rejection of hypothesis.

Results and Discussions:

Cronbach Alpha statistic was calculated to assess the reliability of the questionnaire and to find the inter item reliability. The Cronbach Alpha value comes out to be 0.703 which is greater than 0.7 so it can be concluded that questionnaire was reliable enough as an instrument to test the preferences of the respondents

Table 1: Reliability Statistic

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.703	.719	20

Table 2: Item Statistic For Attributes

	Mean	Std. Deviation	N
Package Design	4.09	.702	103
buyer attraction	2.67	1.061	103
Communication	4.03	.692	103
Convenience	2.84	1.194	103
Salability	2.83	1.061	103
Environmental factors	2.72	1.451	103
Liking	2.42	.891	103
Brand	3.81	.929	103
Country of Origin	3.67	.706	103
Colour	3.71	.956	103
Symbols/ Logos	3.82	1.144	103
Size	2.63	1.102	103
Communication	3.73	.819	103
Shape	3.81	.768	103
Brand Image	4.02	.852	103
usability	3.35	.801	103
Ease of handling	2.54	1.092	103
Information	3.35	1.289	103
Disposability	3.81	1.164	103
Protection	4.22	.839	103

The table above shows that package design, communication through the package, brand image and protection are the factors that were given the highest weightage by the respondents. Also the inter item correlation matrix shows that package design is highly correlated to convenience in handling of package and usability of package. It is also found that package design is negatively correlated to salability and brand which indicates towards the case that a branded product can be given less weightage on package design and also if product is highly saleable then less importance can be given to package design.

Also it was learnt from the inter item correlation matrix that liking for a package is highly correlated to buyer attraction and usability of the package which suggest that the reuse of the package like the water bottles prompts user to choose that package. Communication through the brand is highly correlated to shape of the package. Similarly the matrix showed that usability of the package has highest correlation to the ease of handling of the package and also the practical findings reveal that in case of creams or viscous products the shape of opening had been broadened for the product to flow easily thus increasing the ease of handling. Table below shows the coefficients obtained:

Table 3: Model Summary for Package Design

Model	R	R Square	Adjusted R Square
1	.824(a)	.679	.621

a. Predictors: (Constant), Environmental Factors, Communication, Convenience, Salability, Buyer Attraction

b. Dependent Variable: Package Design

The adjusted R2 value tells us that this model accounts for approximately 68% variance in the package design- relatively good model.

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Table 4 ANOVA for package design

Model	Sum of Squares	df	Mean Square	F	Sig.
Regre-ssion	54.443	5	10.889	40.936	.000(a)
Residual	25.770	97	.266		
Total	80.213	102			

a. Predictors: (Constant), Environmental Factors, Communication, Convenience, Salability, Buyer Attraction

b. Dependent Variable: Package Design

The above table reports an ANOVA, which assesses the overall significance of our model. As p<0.05, the model is significant

Table 5: Coefficient For Package Design

Model	Standardized Coefficients	t	Sig.
	Beta		
(Constant)	2.254	4.921	.000
Buyer Attraction	.313	3.019	.003
Communication	.171	1.892	.061
Convenience	.295	3.185	.002
Salability	-.260	-.265	.791
Environment Factors	.106	1.179	.241

a. Dependent Variable: Package Design

The standardized Beta coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this variable has large effect on the dependent variable. The t and sig. value give a rough indication of the impact of each predictor variable. The table above shows the statistical relationship between the dependent variable package design and independent variables. The relationship can be established as

Package design = 2.254 + 0.313 Buyer Attraction + 0.173 Convenience in handling

As per the table shown above significance value or p value for buyer attraction <0.05 and also the value is beta is significantly positive so null hypothesis is rejected and alternate hypothesis is accepted thus showing that significant linear relationship exists between package design and buyer attraction. Yoghurt pots: one plain pot and one bright/cheerful looking pot. The mothers were told that both pots contained the same healthy ingredients, but that the bright pot was slightly more expensive. Despite the price premium, 88% of the mothers said they would choose the bright pot as their children would be more likely to eat it [10]. The significance value for communication is > 0.05 at 95% confidence level so null hypothesis could not be thereby showing that no linear relationship exists between package design and communication. The table also shows that significance value for convenience is <0.05 at 95%confidence level and it suggests the rejection of null hypothesis and acceptance of alternate hypothesis which conveys that significant linear relationship exists between convenience and package design suggesting that packages must be designed so that they are convenient to handle. From the table shown above it can be seen from the value of coefficient that package design and salability of product are negatively related so it can be concluded that highly selling product can be compromised

on its packaging also since the significance level of salability is >0.05 then the null hypothesis can be accepted suggesting that no significant relationship exists between package design and salability. It is evident from the table that significance value of environmental factors >0.05 so it suggests the non-rejection of null hypothesis that depicts that no significant relationship exists between package design and environmental factors. Also the value of coefficient for environmental factor is 0.106 which is too less to have an impact thus suggesting that Indian context the people are less inclined towards the environmental issues. On the basis of the multiple regression model shown above for package design it can be concluded that buyer attraction is the most significant aspect of package design and from the analysis above it can be summarized that people place environmental factors at relatively lower level of significance. If we think something tastes or works better because of its packaging, is there any difference than if it really does? Perception of a food product, for example, has been shown to be affected by a variety of factors including taste, odor, information from labeling and images, attitudes, memory from previous experience, price, prestige, nutritional content, health belief, familiarity and brand loyalty.

Multiple Regressions analysis and discussion for Liking for Package.

Table 6: Model Summary for liking of package

Model	R	R Square	Adjusted R Square
1	.805(a)	.648	.609

a. Predictors: (Constant), Size, Country of Origin, Symbols, Logos, Brand, Colour

b. Dependent Variable: Liking

The adjusted R2 value tells us that this model accounts for approximately 65% variance in the liking package - relatively good model.

Table 7 ANOVA for liking of Package

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	58.435	5	11.687	34.783	.000(a)
Residual	32.614	97	.336		
Total	90.049	102			

a. Predictors: (Constant), Size, Country of Origin, Symbols, Logos, Brand, Colour

b. Dependent Variable: Liking

The above table reports an ANOVA, which assesses the overall significance of our model. As $p<0.05$, the model is significant.

Table 8: Coefficient For Liking For Package

Model	Standardized Coefficients	t	Sig.
Constant)	2.362	4.134	.000
Brand	-.313	-3.186	.002
Country of Origin	-.054	-.538	.592
Colour	.194	1.652	.028
Symbols/ Logos	.000	-.002	.998
Size	.367	3.785	.000

a. Dependent Variable: Liking

The multiple regression model for liking for package can be given as:

Liking for package = 2.362- 0.313 Brand + 0.194 Colour + 0.367 Size

 ISBN: 978-81-910118-7-6

From the table shown above the significance value for brand<0.05 at the 95% level of confidence so the null hypothesis is rejected and alternate hypothesis is accepted thereby corroborating that significant linear relationship exists between liking for package and brand. But at the same time it shows that liking for a package and brand are negatively related to each other. Country of origin had the significance value>0.05 so null hypothesis could not be rejected that no significant relationship exists between country of origin and liking for package. As far as the colour is concerned we can see that the significance value is<0.05 so null hypothesis is rejected and alternate hypothesis which postulates that significant linear relationship exists between liking for package and colour so customers will like the colourful products. Symbols and logos do not seem to have an impact over the liking for package and also the significance value is >0.05 which suggests the non-rejection of null hypothesis which postulates that no significant relationship exists between symbols/ logos and liking for package suggesting that customers get more attracted by colours and size rather than symbols and logos.

In the regression model shown above the size of package had significant impact over the liking for package and it is positively related to liking. Also the significance value for size is <0.05 at 95% confidence level so null hypothesis is rejected and alternate hypothesis is accepted thereby stating that significant linear relationship exists between liking for a package and size of package which indicates the popularity of miniaturization of products in the form of shampoo sachets or deo sticks etc. Packaging in different serving sizes can extend a product into new target markets or help to overcome cost barriers. In developing markets such as South Africa, the pack size can mean the difference between the success or failure of a brand in the informal sector. Smaller packages and portions are usually priced at a lower absolute level making the product more readily affordable to a greater proportion of the population. Some examples of success in this regard include smaller Sunlight and Omo packs servings which have increased the penetration of these brands substantially. The popularity of single cigarettes and smaller packs for analgesics has proven that —good things really do come in small packages. Where smaller packages are not available, entrepreneurial individuals often buy the product and transfer it into smaller non-branded packaging for resale which completely nullifies all the branding benefits of the original pack. In more developed countries, brands that don„t offer smaller or single-size servings make themselves immediately unsuitable for those living in smaller or single households that do not desire family-size packs. On the other hand, larger packs can extend the category to a more social environment.

For example, the 5l juice bottle expanded the fruit juice category from individual and home consumption to social and catering purposes. The popularity of

quart size beer is another example to this the larger size means that the cost per volume is cheaper and more affordable for the masses.

Multiple Regression Analysis for Communication through the Package

Table 9 : Model summary for communication through package.

Model	R	R Square	Adjusted R Square
1	.864(a)	.746	.714

a. Predictors: (Constant), Symbols/ Logos, Information, Shape, Brand, Image

b. DependentVariable:Communication

The adjusted R2 value tells us that this model accounts for approximately 75% variance in the communication through - relatively good model.

Table 10 ANOVA for communication Through Package

Model	Sum of Squares	df	Mean Square	F	Sig.
Regre-ssion	59.483	4	14.871	77.052	.004 (a)
Residual	18.905	98	.193		
Total	78.388	102			

The above table reports an ANOVA, which assesses the overall significance of our model. As p<0.05, the model is significant.

a. Predictors: (Constant), Symbols/ Logos, Information, Shape, Brand Image

b. Dependent Variable: Communication

Table 11 Coefficient For communication through package

Model	Standardized Coefficients	t	Sig.
	Beta		
(Constant)	2.214	4.311	.000
Information	.178	1.522	.031
Shape	.300	3.121	.002
Brand Image	.019	.158	.022
Symbols/ Logos	-.057	-.561	.576
Constant)	2.214	4.311	.000

a. DependentVariable: Communication The multiple regression model for communication aspect of packaging can be given as:

Communication through package = 2.214 + 0.178 Information + 0.300 Shape + 0.019 Brand Image

From the table shown above it is evident that information is positively correlated to the communication and the value of significance is less<0.05 at 95% significance level so the null hypothesis is rejected and alternate hypothesis is accepted thereby stating that significant positive relationship exists between communication through the package and information furnished by the package but at the same time it can be seen that value of coefficient for information is relatively less than shape and brand image which suggests that information should not be too much to cause the clutter on the package. Furthermore, Grossman and Wisenblit found that informational elements tend to be less important than visual in low involvement product decisions:

 ISBN: 978-81-910118-7-6

so graphics and colour become critical so it can be inferred that information plays a vital role in a packaging of products but it should be at the optimum level. The shape has the most profound impact on communication through the package as it is evident from the value 0.300 which is highest among all dependent variables. Also the significance value suggests the acceptance of alternate hypothesis thus establishing a positive linear relationship between the communication aspect of package and shape of package. Brand image of product also has significant impact over the communication through the package which is evident from the value of coefficient for brand image which is 0.019. Also the significance value is <0.05 which suggests the acceptance of alternate hypothesis and rejection of null hypothesis. The package thus communicates to the customers through its brand image. Symbols and logos don not have significant relationship with communication aspect as it is evident from the value of significance which is >0.05 and also the coefficient of symbols/ logos is negative so it does not impact the customers to the greater extent.

Multiple Regression Analysis for Usability of the Package

Table 12 Model summary for usability of the package

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850(a)	.722	.681	.698

a. Predictors: (Constant), Protection, Disposability, Ease of Handling

b. Dependent Variable: Usability

The adjusted R2 value tells us that this model accounts for approximately 68% variance in the Usability of the package – relatively a good model.

Table 13: ANOVA for usability of package

Model	Sum of Squares	df	Mean Square	F	Sig.
Regre-ssion	Regre-ssion	47.232	3	15.744	85.565
Residual	Residual	18.186	99		
Total		65.417	102		

a. Predictors: (Constant), Protection, Disposability, Ease of handling

The above table reports an ANOVA, which assesses the overall significance of our model. As p<0.05, the model is significant.

Table 14 Coefficient for usability of package

Model	Standardized Coefficients	t	Sig.
	Beta		
(Constant)	1.818	3.911	.000
Ease of handling	.477	5.371	.000
Disposability	.063	.720	.473
Protection	.118	1.322	.039
(Constant)	1.818	3.911	.000
Ease of handling	.477	5.371	.000

a. Dependent Variable: Usability

The multiple regression model for liking can be given as:

Usability of Package = 1.818 + 0.477 Ease of handling + 0.118 Protection

From the multiple regression table shown above it can be seen that significance value for ease of handling of package is< 0.05 at 95% significance level so the null hypothesis is rejected and alternate hypothesis is accepted which postulates that the significant relationship exists between usability of product and ease of handling, Also the value of coefficient which is highest among dependent variables shows that it has got highest impact on usability which further suggests that the marketers now a day devise the packages in such a way so that the handling of product inside package becomes easy. Example can be the larger diameter caps for creams, face wash and tooth pastes that are viscous in nature. Also from the table above the significance value for disposability is >0.05 at the confidence level of 95% so the null hypothesis is accepted which postulates that significant linear relationship does not exists between usability of package and disposability which is related to environmental factors. So it can be interpreted in Indian contexts that disposability is not given due weightage when usability is weighed against disposability. The significance value for protection is <0.039 which is lower than 0.05 so null hypothesis is rejected and alternate hypothesis is accepted thereby reaffirming that significant linear relationship exists between usability of package and protection which suggests that the products such as medicines are packaged in such a way so as to protect it from damage from light or environment.

Packaging strategy based on findings

The packaging today has become the vital tool to make the products the

Face in the crowd rather than face of the crowd. It has become the most significant aspect to position the products in the market in an effective manner. The multiple regression analysis of different packaging attributes resulted in surfacing of very important information regarding the packaging parameters. The buyer attraction emerged as the important factor which signals towards the scenario when the packages need to be attraction driven rather than information driven. —In most cases, our experience have been that pack designs are more likely to influence the consumer perception of the brand than advertising. The communication aspect of package was marginally significant so the package as a means to communication as per this research does not carry that significant weight so the more importance should be given to the attracting capability of the package. It was said by Jugger [20] that —Brand purchases are being made or broken in the final five seconds„. So it is very important to decide which attributes of packaging needs to be highlighted and which needs to be downplayed. The study revealed that in Indian context the respondents were not environment conscious to a great extent and the environmental factors pertaining to package design were of less significance so the packages must be designed in such a ways that more effort should be made to produce more environmental friendly packages so balance the low environmental concern. Size emerged as a very important factor thus indicating towards the variation of packages sizes available for a particular

 ISBN: 978-81-910118-7-6

product. We can take examples of shampoo sachet, deodorant sticks, small sized toothpaste packages or even more of FMCG products. We find that variation of size make the affordability of product adjustable as per the income level and standard of living. Packaging in different serving sizes can extend a product into new target markets or help to overcome cost barriers. In developing markets such as South Africa, the pack size can mean the difference between the success and failure of a brand in the informal sector. Smaller packages and portions are usually priced at a lower absolute level – making the product more readily affordable to a greater proportion of the population. The popularity of single cigarettes and smaller packs for analgesics has proven that —good things really do come in small packages. Where smaller packages are not available, entrepreneurial individuals often buy the product and transfer it into smaller non-branded packaging for resale – which completely nullifies all the branding benefits of the original pack. In more developed countries, brands that don„t offer smaller or single-size servings make themselves immediately unsuitable for those living in smaller or single households that do not desire family-size packs. On the other hand, larger packs can extend the category to a more social environment For example; 5l Coca Cola bottle expanded the beverages category from individual and home consumption to social and catering purposes. The popularity of quart size beers is another example where the larger size means that the cost per volume is cheaper and more affordable for the masses. Shape is also very important attribute as it is evidenced form this research and this signals towards the fact that previous shape of package can become important marketing tool. In case of coca cola or other soft drinks, the bottle is the package so the shape of the bottle becomes its brand identity. If we analyze the shapes of different soft drinks like Pepsi or sprite or fruit juices, we can see that different companies have got different shape of bottle. So the shape of package can become an innovative marketing tool creating an iconic brand image through different shaped packages. Instead how we feel about the package is often transferred to how we feel about the product itself. In essence, for consumers the product is the package and the product combined. In this manner the shape of the package must be designed in such a way so as to enable the product to cut through the clutter on shelf space and create its own distinct identity.

The ease of handling also emerged as a very important tool in packaging attributes. The replacement of tin pack of toothpaste with flexible, soft plastic pack, broadening of caps of face wash, shaving cream so that the package can stand upside down, innovation of liquid soap dispenser is the testimony to the fact that more and more effort should be focused on making the package easy to handle and use by the customer. The protection was also given weightage by the respondents so the packages must be designed in such a way that protection from external factors like ultra violet radiations or sunlight is retained and product preservation can be maintained.

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Impact of Service Failure Attributions on Post-Purchase Behavior

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Abstract:

With services marketing maturing as an established field of research, much perspective work has been done on areas like customer satisfaction, retention and loyalty. These areas have received particular attention in services marketing literature because there are higher chances of services (as compared to goods) for not performing upto the expectations of customers. The fundamental characteristics of services make them highly prone to failing to meet customer expectations, leading to frequent dissatisfactory experiences and perceptions of service failure. Services failures may cause a very deep impact on an ongoing customer relationship because customers can infer multiple of causes of service failures. Attribution theory by Fritz Heider (1958) from human psychology literature can help explain the dynamics of customer inferences about such service failures. Drawing inferences from the attribution theory, it is expected that the different types of attributions can have different types of effects on customer relationship. This study aims to enhance the existing research in attribution theory by applying its concepts in the context of Indian retail banking services in order to understand the impacts of service failure attributions on post purchase behaviour.

Introduction:

The research problem guiding the study arises from an in-depth review of the literature on consumer complaining behaviour and related areas like satisfaction, repatronage and trust. It is found that although there are a number of studies on determinants of consumer complaining behaviour and consumer psychology, an addition to existing literature is possible if various customer perceptions of a service failure are explored and used to further extend our knowledge on which are the types of service failure perceptions that affect the satisfaction or dissatisfaction most severely. The research problem being investigated is especially focused at understanding the psychological and behavioural outcomes of a service failure incidence on customer relationship. As customer's post purchase behaviuor has various essential characteristics viz. customer satisfaction, repatronage, and word-of-mouth behaviour. Hence the study proposes to examine the following research problem. "How service failure attributions of Locus, Stability and Controllability affect customer's post purchase behaviour"

Overview of Literature:

Service Characteristics and Marketing Problems Emanating from Service Characteristics: The early services marketing

 ISBN: 978-81-910118-7-6

literature focused on identifying the intangibility and other unique characteristics of services (Zeithmal, Parasuraman, and Berry 1985) viz. intangibility, inseparability, heterogeneity and perishability. These universally agreed upon characteristics have been considered to be the basic differentiating factors between products and services. Due to these inherent characteristics of services, they are more prone to failures as compared to products. Bitner, Booms and Tetreault (1990) defined service failure as "observable decreasing quality in what has been termed as the service encounter."

Consumer Expectations: In the context of services, consumer expectations are the standards or reference points for performance against which service experiences are compared (Zeithaml and Bitner 2003). Parasuraman, Zeithaml and Berry (1995) suggested that customer expectations should be viewed as what a customer feels a service should offer. For the purpose of the current study, consumer expectation are defined based on Parasuraman et al. (1985) as "consumers' pre-consumption beliefs about the performance of a service offering."

Service Failures: A service can be perceived as failed when the consumers feel that the performance has not been up to their expectations. Services marketing literature consists of a few, but parsimonious and informative classifications of service failures. Utilizing critical incident technique (CIT), Bitner, Booms, and Tetreault (1990) identified three types of service failure categories: (1) core service failure or service delivery system failure, i.e., when the requested service is unavailable, unreasonably slow, or not meeting the basic performance standards for the industry, (2) failure to adequately respond to specific consumer needs and requests, and (3) unprompted and unsolicited employee actions, e.g., rude behaviour, or ignoring the consumer.

Consequences of Service Failures: In today's competitive business environment, service firms cannot afford to ignore failures in service delivery. Service failures can result in serious declines in firms' profitability, and can cause decays in consumer commitment, satisfaction, trust, and loyalty. Smith (1997) argued that service failures (1) are prevalent, (2) memorable, and (3) lead to customer defection. Consumer responses to service failures, such as consumer complaining, repatronage, consumer switching, and negative word-of-mouth have been identified under consumer complaining behaviour literature.

Attribution Theory: The present study draws inferences from the Attribution Theory, to study how customer's perceived causal inferences of a service failure affect customer's post purchase behaviours. Customers can infer multiple causes of service failures. Attribution theory, proposed by Fritz Heider (1958) in human psychology literature can help explain the dynamics of customer inferences about such service failures. It is a psychological/ behavioural approach which provides the framework for predicting how people make causal inferences. Attribution theory, as explained by Weiner (1980), views people as rational information processors, whose actions and behaviours are influenced by their

causal inferences i.e., causes attributable to a particular event or situation.Thus, it is not merely the judgment that the product has failed that determines consumer response. People try to determine why the product failed (Folkes 1984b). Attributions can be defined as the causes inferred for product failure.

In customer complaining behaviour literature, attribution theory can be used to predict how customers' perceived reasons for a product failure influence their responses (Folkes 1984a). The theory is concerned with all aspects of causal inferences: how people arrive at causal inferences, what sort of inferences they make and what the consequences of these inferences are Folkes (1984b, 1988). This search for causation (attribution) has been studied in terms of three dimensions by Wiener (1979, 1980).

1. Locus (whether the causes are perceived to be located in the customer 'Internal' or the manufacturer 'External')
2. Stability (whether the causes are perceived to be fairly permanent 'Stable' or relatively temporary and infrequent 'Unstable')
3. Controllability (whether the causes are perceived to be under personal influence or volitional (preventable through exercising certain controls) i.e. 'Controllable' or out of personal influence or non-voilitional (non-preventable) i.e. 'Uncontrollable')

It is expected that the different types of attributions can have different types of effects on customer post purchase behaviour. This study aims to enhance the existing customer satisfaction and service failure research by applying its concepts from attribution theory in the context of Indian retail banking services in order to understand the impacts of service failure attributions on customer's post purchase behaviour. Figure 1 furnishes an integrative service failure attribution model and Table 1 presents an annotated version of the literature reviewed on Attribution Theory in a matrix form.

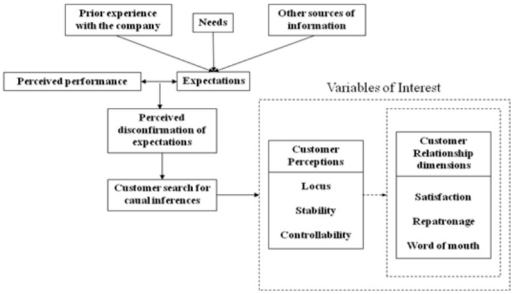

Figure 1: An Integrative Model of Service Failure Attributions

Table 1: An Annotated Version of the Literature reviewed on Attribution theory

Attribution Theory: A psychological/ behavioural approach which provides the framework for predicting how people make causal inferences	Heider, Fritz (1958), "The Psychology of Interpersonal Relations," New York: Wiley
Attributions: Thus, it is not merely the judgment that the product has failed that determines consumer response. People try to determine why the product failed. Attributions can be defined as the causes inferred for product failure	V.S. Folkes, "Consumer reactions to product failure: an attributional approach", The Journal of Consumer Research, vol. 10, pp. 398-409, March 1984.

 ISBN: 978-81-910118-7-6

Locus, Stability, Control: The perception of an event gives rise to a search for causation (Weiner 1980). Following an event, cognition (attribution) – emotion – action temporal sequence is suggested, where causal ascriptions produce affect. This search for causation (attribution) has been studied in terms of three dimensions.	B. Weiner, D. Russell, and D. Lerman, "The cognition-emotion process in achievement-related contexts," Journal of Personality and Social Psychology, vol. 37, pp. 1211-1220, 1979.

Conceptual Framework: The conceptual framework of the study is built with reference to the attribution theory. It is proposed that the three dimensions of customer attribution viz. locus, stability and controllability as proposed be Wiener (1980), would impact customers' post service failure dissatisfaction. The post failure dissatisfaction, in turn would have an effect on customers repatronage and word-of-mouth intentions. Figure 2 givers the diagrammatic representation of the conceptual framework for the present study.

Figure2: Conceptual Model

Research Hypotheses:

The present study is limited to the investigation of the impacts of locus attribution on post-failure dissatisfaction. The research hypotheses are:

H1: The locus attributions impact post service failure dissatisfaction.

H2: External locus attributions have a higher impact on post failure dissatisfaction as compared to internal locus attributions.

Research Design:

After considering the alternative methodologies, an experimental approach has been identified as the appropriate design for this study. This is because an experimental design would give the desired precision in controlling the types of attribution and would be instrumental in isolating the relationship between the stimuli and their effect. The experimental investigation involved careful manipulation of the independent variable i.e., locus attribution dimension.

The study hasutilized a role playing methodology using hypothetical scenarios. The scenarios are generated using a factorial type design and randomly administered upon the experimental subjects. The experimental stimuli are based on the scenarios. Each scenario contains one of the various combinations of the service failure attributions. One scenario is given to each respondent, i.e. a single type of service failure situation is given to each individual respondent. Each attribution dimension is identified and manipulated at two levels i.e. Locus – internal vs. external, Stability – stable vs. unstable, and Controllability – controllable vs. uncontrollable. A 2x2x2 between-subjects pre-test and post-test design is used. The diagrammatic representation of the scenario development

through alternative combinations of attribution dimensions is given in the following sections.

Service Failure Scenario Development:

The objective of the service failure identification was to use a service failure that is relatively frequent in the retail banking services. The responses of some discussants were taken under and unstructured exploratory study to guide the service failure identification.The service failure scenario was developed while ensuring that the experimental participants find the failure scenario easy to understand, easy to relate to, and also find it realistic. At the same time, it was important to ensure that the participants are able to establish that the locus of control for the service failure is external or internal, i.e. they can attribute the cause of service failure to the bank in one scenario and not upon themselves in another. The reason for taking this precaution was to increase the chances that the scenario be judged as a service failure situation by the experiment participants without explicitly being told. This in turn was expected to sensitize the participants towards the service failure and help them develop their own evaluative judgments about the service failure, the service organization, and their possible reactions to the situation.

The two scenarios developed for the present study had the difference in Locus attribution. i.e., one of the scenarios had Internal locus and the other had External locus as the service failure attribution. The exact scenario given to the customers is as given below

Scenario 1:

Group 1: Internal Locus: You had deposited a high value cheque in your bank branch, to be credited in your account. The bank had stamped your deposit slip and acknowledged the cheque deposit. After the stipulated time period for cheque clearing, you realize that that the cheque amount has not got credited in your account. On making the enquiry you are informed that the account number filled in the deposit slip was incorrect, your un deposited cheque is immediately returned to you and you are asked to redeposit it with the correct credit account number.

Scenario 2:

Group 2: External Locus: You had deposited a high value cheque in your bank branch, to be credited in your account. The bank had stamped your deposit slip and acknowledged the cheque deposit. After the stipulated time period for cheque clearing, you realize that that the cheque amount has not got credited in your account. On making the inquiry you are told that although there was no problem with the cheque, there were some technical difficulties in the inward clearing processes and you are told that you will receive your un-deposited cheque along with the reason in some days.

Data collection Method and Sample Size

For the present study a minimum sub-sample of respondents per scenario type was considered appropriate for providing with a reasonable comfort level in conducting

 ISBN: 978-81-910118-7-6

independent statistical analysis within each scenario type. The Frequency distribution of datapoints per scenario is given in the table 2.

Table 2: Frequency Distribution of Data points: Total Number of Respondents

	Frequency	Percent
Scenario 1	35	52.2
Scenario 2	32	47.8
Total	67	100.0

The data collection process involved self-administration of structured questionnaires with largely close-ended items. The respondents however were free to respond to the survey questions by relating them to any bank account that they held and give their pre-test evaluations of their satisfaction levels and behavioural intentions for the bank. Immediately thereafter, the respondents were randomly assigned to one of the service failure scenarios. After going through the assigned service failure scenario, the respondents again answered the post-test questions relating to their evaluation of their satisfaction and behavioural intentions. At the end of the survey, a few reality-check questions were asked to assess whether the respondents considered the service failure scenarios as realistic and could relate to it easily.

Questionnaire Design:

The survey instrument designed for data collection was a structured questionnaire with all close-ended items. All the measures directly related to the research hypotheses were multiple-item bipolar and Likert-type scale items selected from the published research on consumer satisfaction, service failure and consumer complaining behaviour.There were two versions of the questionnaire. These differed in respect of the service failure profile used as an experimental exposure, and measuring respondents' satisfaction, repatronage and word-of-mouth intentions following the hypothesized service failure. All the questions across the questionnaire versions were exactly the same in wording and appeared in the same order.

Data Analysis and Results:

The respondents were allotted one of the two scenarios carrying internal or external locus randomly. The number of valid respondents to whom scenario 1 was allotted was 35 and the number of valid respondents to whom scenario 2 was allotted was 32The descriptive information about the age and gender bifurcations of the respondents is as given below in table 3 and 4.

Table 3: Age

Age in years	Frequency	Percent
18-30	38	56.8
30-40	19	28.5
40-60	4	6
	6	9
Total	67	100

Table 4:Gender

	Frequency	Percent
Male	37	55.2
Female	30	44.8
Total	67	100.0

The number of bank accounts held by a respondent was questioned with the criteria that the responses from a particular respondent would be considered valid only when he or she is currently holding at least one bank account. The results favourably reveal that a majority of 79 percent respondents hold their accounts in two to three different banks, 11.9 percent respondents deal with a minimum of 1 bank and 9 percent of them have accounts in over 3 different banks. This ensures that all the respondents are current users of banking services.

Table 5 Number of bank accounts held

	Frequency	Percent
One	8	11.9
Two to Three	53	79.1
More Than three	6	9.0
Total	67	100.0

Experimental Analysis:

Comparisons between Pre-test and Post-test Measurements: It would be important to assess whether the experimental stimuli brings about any changes in customers' post-stimuli satisfaction and behavioural intentions. Statistical comparisons between pretest and posttest measurements have been conducted to investigate if there are any changes, if at all, in the consequent variable measurements.

Comparisons between Pre-test Measurements: Since the study aimed at examining the effects of service failure attributions on consumers' repatronage intentions and negative word-of-mouth intentions, it was necessary that the respondents' have similar exposure to banking services before the service failures carrying different levels of service failure attributions were imposed on them. To achieve this objective, the respondents' pre service failure satisfaction levels, repatronage intentions and negative word of mouth intentions were measured. However, it was still deemed important to statistically examine whether this objective was achieved or not. The respondents were clustered into two depending on whether they received Internal or external locus in their respective scenarios. A one way ANOVA procedure was employed to test for the differences between means of respondents' Pre service failure satisfaction (PRESAT), Pre service failure repatronage intentions (PREPAT), and Pre service failure negative word-of-mouth intentions (PREWOM) between respondents of Group 1 (Internal Locus) and Group 2 (External Locus). The results of the tests are presented in table 6.

Table 6:One-way ANOVA for Pre-test Variables

		N	Mean	Std. Deviation	F	Sig.
(PRESAT)	Group1	35	3.993	.3905		
	Group2	32	4.055	.5378	.294	.590
	Total	67	4.022	.4641		
(PREPAT)	Group1	35	3.943	.5564		
	Group2	32	3.975	.5605	.055	.815
	Total	67	3.958	.5544		
(PREWOM)	Group1	35	4.12	.967		
	Group2	32	4.23	.890	.213	.646
	Total	67	4.17	.925		

 ISBN: 978-81-910118-7-6

When the respondents were grouped according to whether they received internal or external locus, it is clear from table 6 that the all the differences in means of (PRESAT), (PREPAT), (PREWOM) between Group1 and Group2 respondents for the pre-test variables were not found to be significant at 0.590, 0.815 and 0.646 significance respectively. This shows that that before provoking the failure the population was homogeneous and emotions were consistent across the experiment subjects. Thus we are able to build the confidence that now if any differences appear between respondents' post service failure emotions they will be a cause of the service failure administered upon them. This leads us to the conclusion that any significant differences found between post-test measurements of the respondents could confidently be attributed to the experimental stimulus (service failure) and not to the extra-stimulus conditions and any other extraneous factors. The next two sections explore differences between post-test measurements of the respondents' satisfaction, trust, and behavioural intentions.

Comparisons between Post-test Measurements:

a. Comparisons between Service Failure Attributions:

The subjects were divided on the basis of whether they received internal locus (Group 1) or external locus (Group 2) level of experimental manipulations. Tests for comparison of means of perceived service failure attributions between the internal locus and external locus groups for all the three attribution types were then conducted. Table 7 shows the results of the manipulation checks for each service failure attribution type. It is clear from the table that the differences between means of perceived service failure attribution for each type of manipulation are significant at 0.000, 0.003 and 0.000 for Locus, Stability and Controllability.

Table 7: One-way ANOVA for Attribution Dimensions

		N	Mean	Std. Deviation	F	Sig.
(LOCUS)	Group1	35	3.086	1.0181		
	Group2	32	3.953	.8459	14.237	.000
	Total	67	3.500	1.0299		
(STABILITY)	Group1	35	2.23	.547		
	Group2	32	2.69	.681	9.323	.003
	Total	67	2.45	.652		
(CONTRO-LLABILITY)	Group1	35	2.89	1.030		
	Group2	32	3.92	.636	24.005	.000
	Total	67	3.38	1.004		

Thus, the experimental manipulations designed were successful with high evidence of validity.It is also observed that the means of all the service failure attributions i.e. Locus, Stability, and Controllability came out to be higher for Group 2 as compared to Group 1. Thus as Group 2 was allotted the scenario carrying external locus, it can be concluded that when the locus of a service failure is external (the cause of the service failure is perceived to be in the service provider) then the service failure is considered to be more stable (permanent) and more controllable (avoidable by the service provider) than when the locus is internal (i.e. the cause of the service failure in the consumer).

b. One-way ANOVA for Post-test Variables:

Since it has already been established in the previous section that the respondents did not differ with respect to these variables prior to receiving the service failure, evidence of significant differences in the post- service failure context would strengthen the argument that the respondents' post service failure attitudes, beliefs, and intentions are a function of the perceived service failure attributions, given a set of failure perceptions. To achieve this objective, respondents were grouped into two groups Group 1 and Group 2,by the level of locus i.e., internal or external,each type received respectively. The post-test measurements between these groups' post service failure satisfaction (POSTSAT), post service failure repatronage intentions (POSTPAT), and post service failure negative word-of-mouth intentions (POSTWOM) were then compared through one way ANOVA.Table 8 shows the results for testing the differences between means of all the post-test measurements when the respondents were grouped according the levels of locus received. It is clear that the two respondent groups significantly differed with each other in terms of post service failure satisfaction (POSTSAT), post service failure repatronage intentions (POSTPAT), and post service failure negative word-of-mouth intentions (POSTWOM) at 0.000, 0.002, 0.15 respectively.

ANOVA results for comparison of (POSTSAT), (POSTPAT) AND (POSTWOM) means of two different splits of the dataset showed that post service failure repatronage intentions were different for respondents receiving internal and external locus of service failure. Thus, there is sufficient evidence that the service failure scenarios induced significant changes in respondents' satisfaction, repatronage and behavioural intentions which were found to be consistent across the same groups of respondents before they received the service failure.

Table 8:One-way ANOVA for Post-test Variables

		N	Mean	Std. Deviation	F	Sig.
POSTSAT	1	35	2.76	.783		
	2	32	1.63	.564	45.875	.000
	Total	67	2.22	.891		
POSTPAT	1	35	3.457	.6749		
	2	32	3.013	.4187	10.268	.002
	Total	67	3.245	.6059		
POSTWOM	1	35	3.54	.898		
	2	32	3.05	.644	6.249	.015
	Total	67	3.31	.817		

It is also observed that the means of post service failure satisfaction (POSTSAT), post service failure repatronage intentions (POSTPAT), and post service failure negative word-of-mouth intentions (POSTWOM) in case of Group 1 (internal locus) are higher than that of Group 2 (external locus). It should be noted here that the negative word –of-mouth scores had been reversed for analysis.Thus it can be concluded that when the locus is internal (the cause of the service failure lies in the consumer) the post service failure satisfaction, repatronage intensions and word-of-mouth are favourable as compared to when the locus is external (the cause of the service failure lies in the service provider).

 ISBN: 978-81-910118-7-6

In brief, respondents with internal locus reported high levels of post-failure satisfaction, repatronage intentions and low levels of negative word-of-mouth intentions as compared to the respondents perceiving external locus. Also, the respondents' satisfaction and behavioural intentions means were found to be significantly different across Group 1(internallocus) and Group 2 (external locus), implying that the different levels of locus resulted in bringing about significant changes in these variables across the groups of respondents perceiving different servicefailure attributions.

Paired Comparisons between Pre-test and Post-test Measurements: It was considered to be of high practical significance to identify what kind of and level of changes the different service failure attributions bring about in complainants' satisfaction, and behavioural intentions. For this purpose, a paired sample analysis was considered to be appropriate because it could facilitate direct comparisons between each individual respondent group's pre and post service failure observations. The respondents' were divided into two groups depending on the scenarios they had received. Pre service failure and post service failure measurements on respondents' satisfaction (PRESAT and POSTSAT), repatronage intentions (PREPAT and POSTPAT), and negative word-of-mouth intentions (PREWOM and POSTWOM) were then compared through a paired sample t-test design. The results of thepaired sample t-tests are shown in table 9 for Group 1(internal locus) and table 10 for Group 2 (external locus).

Table 9:Group 1 (Internal Locus) Paired Samples Test

		Paired Differences		T	df	Sig.(2-tailed)
		Mean	Std. Deviation			
Pair 1	PRESAT - POSTSAT	1.22857	.98774	7.359	34	.000
Pair 2	PREPAT - POSTPAT	.4857	.7084	4.056	34	.000
Pair 3	PREWOM - POSTWOM	.586	.887	3.907	34	.000

Table 10: Group 2 (External Locus) Paired Samples Test

		Paired Differences		T	df	Sig.(2-tailed)
		Mean	Std. Deviation			
Pair 1	PRESAT - POSTSAT	2.4297	.8735	15.734	31	.000
Pair 2	PREPAT - POSTPAT	.9625	.7661	7.107	31	.000
Pair 3	PREWOM - POSTWOM	1.1719	1.0188	6.506	31	.000

Conclusion

It can be inferred from table 9 and 10 that the difference between the pre service failure satisfaction, repatronage and word-of-mouth intentions and the post service failure satisfaction, repatronage and word-of-mouth intentions for both the groups are significant . Also, as has been established the post–test comparisons ofthe service failure scenarios induced significant changes in respondents' satisfaction, repatronage and behavioural intentions which were found to be consistent across the same groups of respondents before the service failure

was induced. Thus, we can conclude that locus of a service failure as a service failure attribution has an impact on the post service failure satisfaction, repatronage and word-of-mouth intentions, which supports the hypothesis 1: The locus attributions impact post service failure dissatisfaction

Also, if we compare the results of the paired test results ofGroup 1(internal locus) Group 2 (external locus), we find that the paired difference in means of pre-test and post-test satisfaction levels of satisfaction, repatronage and word-of mouth are less in Group 1(internal locus) than the difference observed in Group 2 (external locus).This signifies that the observed difference in post service failure satisfaction, repatronage and word-of-mouth intentions is higher when the locus is external. Thus, we can conclude that this supports our hypothesis 2: External locus attributions have a higher impact on post failure dissatisfaction as compared to internal locus attributions

Managerial Implications: The study emphasises on how the perceived attributions of a service failure affect the overall customer relationship. The research will help us identify the service failure attribution dimension which has the highest significant impact on customer relationship. This can help in the early identification and management of service failures which have the highest adverse effect on customer relationship.The service failure attributions if correctly managed may lead to higher satisfaction and loyalty of a customer as compared to a customer who has never come across a failure.This is because while assessing a service failure, a customer can assess the basic intent of the service provider along with their processes and policies. Thus, the customer may gain an additional trust in the service provider by appreciating their 'true test of commitment' through their ability to manage crisis and difficult situations.

Limitations of the Study: This research employed an experimental methodology involving a survey with random assignment of treatments to participants. The experiment was based on hypothetical service failure scenarios which may be criticized for their insufficiency to replace real-life service situations and to stimulate the level of emotional involvement of the respondents. Moreover, the use of written scenarios may not have been able to fully substitute real life service situations where customers can actually experience very short/long waiting times and very pleasant/unpleasant service employees before forming their judgments. The experiment was based on a 'low emotional involvement' situation and generalizability of the results to contexts such as healthcare services, which are characterized by high emotional involvement, would be doubtful. One of the key limitation of the study is inclusion of limited number of variables. The impact of service criticality and severity, although important, are difficult to assess in a single experimental study, and it would be difficult to exclude customers with individual exit barriers and high search costs.

Future Research Directions: The avenues for future research include (1) enhancing the integrative model proposed in this study, (2) exploring the possible

 ISBN: 978-81-910118-7-6

variations in the model based on different customer groups and industry settings, and (3) extending the model to include variables that are still underexplored in service failure research.

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Green Marketing

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Introduction:

The globalised world today is facing environmental issues like global warming, pollution, abruptly changing weather conditions, health issues and so on. The biggest challenge today is to keep the environment pollution free and maintaining the tranquility of the nature. The industrial sector and the consumers of today's era have become conscious of having a pollution free environment. Companies have started giving importance to the practices like Corporate Social Responsibility, Social Marketing, Green Marketing, etc. to a great extent voluntarily.

Objectives:

1. To study the concept of green marketing
2. To study the present scenario of Green marketing in India with reference to Telecom, FMCG, Automobile and Pharmaceutical sector
3. To find out the strategies needed for successful Green marketing

Core Concepts:

The important concepts discussed in this research paper are as follows- 1. Concept, need and importance of Green Marketing. 2. Green marketing advertising.

Research Methodology:

The research paper is based on the secondary data. The inputs have been collected from the source of internet, magazines and journals.

Analysis:

Points Covered

1. Concept of Green Marketing
2. Problems associated with Green Marketing
3. Present scenario of Green Marketing in India
4. Examples of Green Marketing in India
5. Why are firms using green marketing?
6. Green Marketing strategies
7. Green Marketing Advertising

Concept of Green Marketing:

"Green Marketing" refers to holistic marketing concept wherein the production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the

 ISBN: 978-81-910118-7-6

environment with growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc.

Definition of Green Marketing:

According to the American Marketing Association, "Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment. Environmental marketing, more popularly known as green marketing or sustainable marketing as defined by Polonsky is, —the effort by a company to design, promote, price and distribute products in a manner which promotes environmental protection.

Marketing Mix of Green Marketing:

The Four Ps of Green Marketing are as follows:

1. Product: The companies who practice green marketing should

- Identify customers' environmental needs and develop products to address these needs; or
- Develop environmentally responsible products to have less impact than their competitors

These companies can produce the following categories of products for their sustainable development:

- Products made from recycled goods
- Products that can be recycled or reused
- Efficient products, which save water, energy or gasoline, save money and reduce environmental impact
- Products with environmentally responsible packaging
- Organic products
- A service that rents or loans products (Eg: toy libraries)
- Certified products, which meet or exceed environmentally responsible criteria

Example:

The Sony Group Environmental Vision presents a philosophy and principles for environmental management activities throughout the global Sony Group with the aim of contributing to the realization of a sustainable society.

Fig: No: 1 Sony Company's Environmental Perspectives

Climate Change

Sony reduces energy consumption and strives to achieve zero emissions of greenhouse gases* generated throughout the lifecycle of their products, service and business activities.

Resources Conservation

In order to minimize resource inputs for their business activities, Sony identifies "Key Resources" and strives to achieve zero usage of those virgin materials. Sony also uses water efficiently, minimizes wastes from sites and maximizes our effort for take back and recycling products from markets.

Management of Chemical Substances

Sony minimizes the risk of chemical substances that cause serious harm to human health and the environment. Sony maintains strict control over the chemical substances, while in line with the precautionary approach, taking steps whenever possible to reduce, substitute and eliminate the use of substances that have potentially significant impacts on the environment even in the cases where scientific evidence is not fully proven.

Biodiversity Conservation

Sony protects and utilizes ecosystem services in a sustainable manner, while actively promoting maintenance and recovery of biodiversity through their business and local contribution activities.

Price

Pricing is a critical element of the marketing mix. Most customers are prepared to pay a premium if there is a perception of additional product value.

This value may be improved performance, function, design, visual appeal or taste. Environmental benefits are usually an added bonus but will often be the deciding factor between products of equal value and quality. Environmentally responsible products, however, are often less expensive when product life cycle costs are taken into consideration.

Green pricing takes into consideration the people, planet and profit in a way that takes care of the health of employees and communities and ensures efficient productivity. Value can be added to it by changing its appearance, functionality and through customization, etc.

Example: Wall Mart unveiled its first recyclable cloth shopping bag. IKEA started charging consumers when they opted for plastic bags and encouraged people to shop using its "Big Blue Bag".

Place

The choice of where and when to make a product available has a significant impact on the customers. Hence marketers, who introduce new green products should position themselves broadly in the market place. Very few customers go out of their way to buy green products. So there is a need for the marketers to promote their products more. The location, which is an important factor in marketing, must also be consistent with the image which a company wants to project. The location must differentiate a company from its competitors. This can be achieved by in-store promotions and visually appealing displays or using recycled materials to emphasize the environmental and other benefits.

Green place is about managing logistics to cut down on transportation emissions, thereby in effect aiming at reducing the

 ISBN: 978-81-910118-7-6

carbon footprint. Example: instead of marketing an imported mango juice in India it can be licensed for local production. This avoids shipping of the product from far away, thus reducing shipping cost and more importantly, the consequent carbon emission by the ships and other modes of transport.

Promotion:

Promoting products and services to target markets includes paid advertising, public relations, sales promotions, direct marketing and on-site promotions. Smart green marketers will be able to reinforce environmental credibility by using sustainable marketing and communications tools and practices. For example, many companies in the financial industry are providing electronic statements by email, e-marketing is rapidly replacing more traditional marketing methods, and printed materials can be produced using recycled materials and efficient processes, such as waterless printing. Retailers, for example, are recognizing the value of alliances with other companies, environmental groups and research organizations when promoting their environmental commitment. To reduce the use of plastic bags and promote their green commitment, some retailers sell shopping bags, under the banner of the Go Green Environment Fund or use recyclable plastic bags.

Evolution of Green Marketing:

Attention was drawn to the subject in the late 1970's when the American Marketing Association organized the first ever workshop on —Ecological marketing in 1975 which resulted in the first book on the subject entitled —Ecological Marketing" by Henion and Kinnear in 1976.

Peattie and Crane (2005) claims that despite the early development, it was only in the late 1980's that the idea of Green Marketing actually made an appearance because of the consumers growing interest in green products. Green marketing was given prominence in the late 1980s and 1990s after the proceedings of the first workshop on Ecological marketing held in Austin, Texas (US), in 1975. Several books on green marketing began to be published thereafter. The green marketing has evolved over a period of time. According to Peattie (2001), the evolution of green marketing has three phases.

- First phase was termed as —Ecological" green marketing, and during this period all marketing activities were concerned to help environment problems and provide remedies for environmental problems.
- Second phase was "Environmental" green marketing and the focus shifted on clean technology that involved designing of innovative new products, which take care of pollution and waste issues.
- Third phase was "Sustainable" green marketing. It came into prominence in the late 1990s and early 2000. During 1990s, the concern for environment increased and resulted in to increasing challenges for the companies (Johri and Sahasakmontri, 1998). Dutta, B.

The idea of developing good quality products which can meet consumer needs and wants by focusing on the quality, performance, pricing and convenience in an environment-friendly way became popular in this phase.

- Today green marketing is a vital component of marketing research. The increasing media exposure and pressure on firms to present eco friendly behavior has grabbed the attention of the firms and companies worldwide. The growth in green marketing over the years has been promoted by adoption of product packaging and presenting to the public these improvements.

Problems in Green Marketing:

Although a large number of firms are practicing green marketing, it is not an easy job as there are a number of problems which need to be addressed while implementing green marketing. The major challenges to green marketing which have to be faced are:

- **New Concept:** Indian literate and urban consumer is getting more aware about the merits of green products. But it is still a new concept for the masses. The consumer needs to be educated and made aware of the environmental threats. The new green movements need to reach the masses and that will take a lot of time and effort
- **Cost Factor:** Green marketing involves marketing of green products/services, green technology, green power/ energy for which a lot of money has to be spent on R&D programmes for their development and subsequent promotional programs which ultimately may lead to increased costs.
- **Convincing customers:** The customers may not believe in the firm's strategy of green marketing. The firm therefore should ensure that they undertake all possible measures to convince the customer about their green product, the best possible option is by implementing Eco-labeling schemes. Eco-labeling schemes offer its —approval to —environmentally less harmless products. In fact, the first eco-label program was initiated by Germany in 1978. Sometimes the customers may also not be willing to pay the extra price for the products.
- **Sustainability:** Initially the profits are very low since renewable and recyclable products and green technologies are more expensive. Green marketing will be successful only in long run. Hence the business needs to plan for long term rather than short term strategy and prepare for the same, at the same time it should avoid falling into lure of unethical practices to make profits in short term.
- **Non Cooperation:** The firms practicing green marketing have to strive hard in convincing the stakeholders and many a times it may fail to convince them about the long term benefits of Green marketing as compared to short term expenses.

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- **Avoiding Green Myopia:** Green marketing must satisfy two objectives: improved environmental quality and customer satisfaction. Misjudging either or overemphasizing the former at the expense of the latter can be termed — green marketing myopia.

Present Scenario of Green Marketing in India:

Trends may come and go, and of course, it is impossible for any green business to stay on top of all of them, nor is it worthwhile to try. However, keeping track of green business trends is a great way to ensure that your business stays fresh, flexible, and creative in the face of new challenges and opportunities.

Consumers: As per research, India is the only country to choose deforestation and air pollution as the most important green issue. India is the only country in which more consumers say it should be developing countries that should focus on green innovation versus developed countries. The results of the recently released 2011 edition of the Green Brands Survey show that concern about the environment by the consumers, is translating into a willingness to pay for a premium for green products. 64% of Indian consumers indicate that they plan to spend more on green products next year. Furthermore consistent with emerging countries, Indians are willing to pay a green premium price, with 48% of Indians willing to spend 10% more on a product simply because it is green. Consumers in India are trusting of green advertising compared to other countries, with 86% of Indian consumers reporting that advertising about green products help them in making choices. In India 28% of consumers intend to purchase auto in the next year as compared to purchase of 16% in last year.

Producers: AMUL has been rated as the Top Indian Green Brand by Global Green Brands survey. The International Dairy federation has also awarded AMUL Green movement as the best Environment Initiative in the —Sustainability Category in 2010.It also has been awarded Srishtis good green Governance award for four consecutive years since 2011. The 2011, top 10 Green Brands in India are:

1. AMUL
2. Dabur India ltd.
3. Infosys
4. Taj Hotels
5. Britannia Industries ltd.
6. Suzlon India
7. Hindustan Unilever Ltd.
8. Wipro technologies ltd.
9. Maruti Udyog ltd.
10. Godrej Consumer Products

Government: The Indian government has also done its share in promoting green marketing and eco friendliness by way of banning plastic bags from daily use, helping its automotive industry to develop greener vehicles by supporting hybrid and electric vehicles (EVs), by investing in greener cars. The Government of India is capitalizing on an underutilized segment and building an infrastructure that will generate

economic growth and reduce emissions. The government took the initiative of promoting green buildings construction, usage of alternate sources of energy by companies. Governmental Bodies are forcing firms to Become More Responsible. In most cases the government forces the firm to adopt policy which protects the interests of the consumers by reducing production of harmful goods or by products, Modify consumer and industry's use and /or consumption of harmful goods; or, Ensure that all types of consumers have the ability to evaluate the environmental composition of goods.

Examples of Green Marketing:

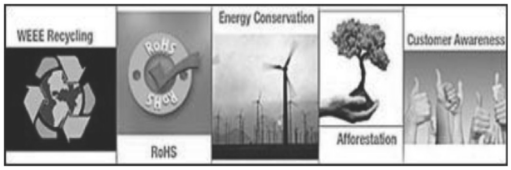
Following sectors are covered through various examples:

1. Telecom and IT
2. Automobile
3. FMCG
4. Pharmaceutical
5. Public Sector Undertakings
6. Others

Telecom and IT Sector:

i. **IDEA Cellular:** One of the best Indian companies, IDEA, paints India green with its national 'Use Mobile, Save Paper' campaign. The company had organized Green Pledge campaigns at Indian cities where thousands came forward and pledged to save paper and trees. IDEA has also set up bus shelters with potted plants and tendril climbers to convey the green message.

ii. **HCL Technologies:** HCL Technologies Environment Management Policy under HCL eco Safe: This IT major may be considered as the icon of Indian green initiatives, which takes —go green steps in solving the problem of toxics and e-waste in the electronics industry. HCL is committed to phasing out the hazardous vinyl plastic and Brominated Flame Retardants from its products and has called for a Restriction on Hazardous Substances (RoHS) legislation in India. In building a system to identify, develop and sustain the maintenance of an environment management system at corporate level it has formulated a program that refers as HCL's eco safe. The key objective under HCL eco-Safe is targeted at integrating environmental management procedures into its business processes thereby protecting the environment, health, and safety of all its stakeholders. HCL commits to manufacture products that are environment friendly in all respects and are free from hazardous chemicals.HCL eco-Safe focuses on product lifecycle management to ensure that our products right from when they are manufactured, bought by customers, recovered at their end-of-life and recycled after useful life are done in an environmentally responsible manner.



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iii. **Wipro's Green Machines:** Wipro Infotech was India's first company to launch environment friendly computer peripherals. For the Indian market, Wipro has launched a new range of desktops and laptops called Wipro Greenware. These products are RoHS (Restriction of Hazardous Substances) compliant thus reducing e-waste in the environment. Wipro Technologies, which is one of the top 10 green Indian companies is never complete without Wipro which climbed to the top five brand league in Green peace's 'Guide to Greener Electronics' ranking. Despite the global financial crisis, Wipro held fast to its commitment towards energy efficiency and was lauded for launching energy star compliant products in the market.

iv. **Hewlett-Packard Development Company:** The consumer electronics sector provides room for using green marketing to attract new customers. One example of this is HP's promise to cut its global energy use 20 percent by the year 2010.[21] To accomplish this reduction below 2005 levels, The Hewlett-Packard Company announced plans to deliver energy-efficient products and services and institute energy-efficient operating practices in its facilities worldwide

FMCG Sector:

i. **ITC Limited:** ITC strengthened their commitment to green technologies by introducing 'ozone-treated elemental chlorine free' bleaching technology for the first time in India. The result is an entire new range of top green products and solutions: the environmentally friendly multi-purpose paper that is less polluting than its traditional counterpart. ITC has been 'Carbon Positive' three years in a row (sequestering/storing twice the amount of CO2 than the Company emits).

* 'Water Positive' six years in a row (creating three times more Rainwater Harvesting potential than ITC's net consumption).

* Close to 100% solid waste recycling.

* All Environment, Health and Safety Management Systems in ITC conform to the best international standards

ii. **Nike Shoes:** It is the first among the shoe companies to market itself as green. It is marketing its Air Jordan shoes as environment-friendly, as it has significantly reduced the usage of harmful glue adhesives. It has designed this variety of shoes to emphasize that it has reduced wastage and used environment-friendly materials.

iii. **Unilever, India:** The Surf Excel detergent which saves water (advertised with the message—"do bucket paani roz bachana") and the energy-saving LG consumers durables are examples of green marketing. We also have green buildings which are efficient in their use of energy, water and construction materials, and which reduce the impact on human health and the environment through better design,

construction, operation, maintenance and waste disposal. In India, the green building movement, spearheaded by the Confederation of Indian industry (CII) - Godrej Green business Center, has gained tremendous impetus over the last few years. From 20,000 sq ft in 2003, India's green building footprint is now over 25 million sq ft.

iv. **McDonald's Corporation:** McDonald's restaurant's napkins, bags are made of recycled paper. McDonald's replaced its clam shell packaging with waxed paper because of increased consumer concern relating to polystyrene production and Ozone depletion.

v. **Philips Light's CFL:** Philips extensive collection of energy saving light bulbs offers a wide range of earth friendly alternatives to the traditional light bulbs. Compared to 'traditional' lamps, Philips energy saving lamps use less energy to generate the same amount of light, last longer, and do not need to be replaced as frequently. That means making the switch is not only good for the environment, but it is cost effective too.

vi. **The Coca Cola Company:** Coca-Cola pumped syrup directly from tank instead of plastic which saved 68 million pound/year. An example of a firm that does not promote its environmental initiatives is Coca-Cola. They have invested large sums of money in various recycling activities, as well as having modified their packaging to minimize its environmental impact. While being concerned about the environment, Coke has not used this concern as a marketing tool. Thus many consumers may not realize that Coke is a very environmentally committed organization.

Automobile Sector:

i. **Tata's new mantra:** Going Green The ideal global benchmark though is 1.5. Tata Motors is setting up an eco-friendly showroom using natural building material for its flooring and energy efficient lights. Tata Motors said the project is at a preliminary stage. Another eco-friendly consumer product that is in the works is Indica EV, an electric car that will run on polymer lithium ion batteries. Tata Motors plans to introduce the Indica EV in select European markets this year.

ii. **Hero Honda Motors:** Hero Honda is one of the largest two-wheeler manufacturers in India and an equally responsible top green firm in India. The company's philosophy of continuous innovation in green products and solutions has played a key role in striking the right balance between business, mankind and nature.

iii. **Maruti:** Greening of Supply Chain The company credited the 'Just-in-Time' philosophy adopted and internalized by the employees as the prime reason that helped to excel in this direction. The company has been promoting 3R since its inception. As a result the company has not only been able to recycle 100% of treated

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waste water but also reduced fresh water consumption. The company has implemented rain water harvesting to recharge the aquifers. Also, recyclable packing for bought out components is being actively promoted. The company has been facilitating implementation of Environment Management System (EMS) at its suppliers' end. Regular training programs are conducted for all the suppliers on EMS. Surveys are conducted to assess the vendors who need more guidance. The systems and the environmental performance of suppliers are audited. The green co-efficient of this system is much better than the conventional system.

vi. **Reva Electric Cars:** A Bangalore based electric car company, Reva, has already sold more than 3,000 cars since it was launched in 2001. Reva has launched the Electric Vehicle in 20 major cities across Asia, Europe and South America.

Public Sector Undertaking:

i. **Suzlon Energy:** The world's fourth largest wind-turbine maker is among the greenest and best Indian companies in India. Tulsi Tanti, the visionary behind Suzlon, convinced the world that wind is the energy of the future and built his factory in Pondicherry to run entirely on wind power. Suzlon's corporate building is the most energy-efficient building ever built in India.

ii. **Oil and Natural Gas Company (ONGC):** India's largest oil producer, ONGC, is all set to lead the list of top 10 green Indian companieswith energy-efficient, green crematoriums that will soon replace the traditional wooden pyre across the country. ONGC's Mokshada Green Cremation initiative will save 60 to 70% of wood and a fourth of the burning time per cremation.

iii. **Digital Tickets by Indian Railways:** Recently IRCTC has allowed its customers to carry PNR no. of their E-Tickets on their laptop and mobiles. Customers do not need to carry the printed version of their ticket anymore.

iv. **Green IT Project:** State Bank of India:- By using eco and power friendly equipment in its 10,000 new ATMs, the banking giant has not only saved power costs and earned carbon credits, but also set the right example for others to follow. SBI is also entered into green service known as 'Green Channel Counter'. SBI is providing many services like; paper less banking, no deposit slip, no withdrawal form, no checks,no money transactions form all these transaction are done through SBI shopping & ATM cards. State Bank of India turns to wind energy to reduce emissions. The wind project is the first step in the State Bank of India's green banking program dedicated to the reduction of its carbon footprint and promotion of energy efficient processes, especially among the bank's clients.

vii. **Forest & Environmental Ministry of India:** No Polythene carry bags for free

:-Forest & Environmental Ministry of India has ordered to retail outlets like BigBazar, More, Central, D-Mart etc that they could provide polythene carry bags to customers only if customers are ready for pay for it.

Pharmaceutical Sector:

i. **Johnson & Johnson Company:** Johnson & Johnson now has 30 products in its Earthwards portfolio of environmentally conscious health care and pharmaceutical products. Earthward products mean it is an internal process used by the company's product teams to innovate better products with smaller environmental footprints. the Earthwards portfolio include Band-Aid adhesive bandages and Neutrogena Naturals skin care products. Band-Aid products now come in smaller cartons and shippers, resulting in less overall packaging material and greater efficiency in freight transport. Neutrogena Naturals use 86 to 100 percent naturally derived ingredients and the packaging used for these products is made of at least 50 percent post-consumer recycled materials.

Other Examples:

i. **Body Shop:** Organizations like the Body Shop heavily promote the fact that they are environmentally responsible. The firm was established specifically to offer consumers environmentally responsible alternatives to conventional cosmetic products. This philosophy is directly tied to the overall corporate culture, rather than simply being a competitive tool.

ii. **Walt Disney World:** Another firm who is very environmentally responsible but does not promote this fact, at least outside the organization, is Walt Disney World (WDW). WDW has an extensive waste management program and infrastructure in place, yet these facilities are not highlighted in their general tourist promotional activities (Murphy 1985).

iii. **IndusInd Bank:** Green banking has been catching up as among the top Indian green initiatives ever since IndusInd opened the country's first solar-powered ATM and pioneered an eco-savvy change in the Indian banking sector. The bank is planning for more such initiatives in addressing the challenges of climate change.

iv. **Agartala to be India's first Green City:** Tripura Sunday announced plans to make all public and private vehicles in Agartala run on compressed natural gas (CNG) by 2013, thus making the capital 'India's first green city'. Tripura Natural Gas Co Ltd (TNGCL), a joint venture of the Gas Authority of India Ltd (GAIL) and the Tripura and Assam governments, has undertaken a project to supply CNG to all private and government vehicles. CNG will also be available to those now using electricity, petrol and diesel to run various machineries. TNGCL chairman Pabitra Kar told reporters. He said: 'The company will soon provide PNG

 ISBN: 978-81-910118-7-6

connections to 10,000 new domestic consumers in the city and outskirts. Agartala will be the first city in India within the next three years to become a green city.

v. **India's 1st Green Stadium:** The Thyagaraja Stadium stands tall in the quiet residential colony behind the Capital's famous INA Market. It was jointly dedicated by Union Sports Minister MS Gill and Chief Minister Sheila Dikshit on Friday. Journal of Engineering, Science and Management Education Dikshit said that the stadium is going to be the first green stadium in India, which has taken a series of steps to ensure energy conservation and this stadium has been constructed as per the green building concept with eco-friendly materials.

Why are firms using Green Marketing?

Both marketers and consumers are becoming increasingly sensitive to the need for switching to green products and services. While the shift to "green" may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous, cost-wise too, in the long run. When looking through the literature there are several suggested reasons for firm's increased use of Green Marketing. Five possible reasons cited are:

1. Organizations perceive environmental marketing to be an opportunity that can be used to achieve its objectives [Keller 1987, Shearer 1990];
2. Organizations believe they have a moral obligation to be more socially responsible [Davis 1992, Freeman and Liedtka 1991, Keller 1987, McIntosh 1990, Shearer 1990];
3. Governmental bodies are forcing firms to become more responsible [NAAG 1990];
4. Competitors' environmental activities pressure firms to change their environmental marketing activities [NAAG 1990]; and
5. Cost factors associated with waste disposal, or reductions in material usage forces firms to modify their behavior [Azzone and Manzini 1994].

Opportunities:

It appears that all types of consumers, both individual and industrial are becoming more concerned and aware about the natural environment. As demands change, many firms see these changes as an opportunity to be exploited. Firms marketing goods with environmental characteristics will have a competitive advantage over firms marketing non-environmentally responsible alternatives. There are numerous examples of firms who have strived to become more environmentally responsible, in an attempt to better satisfy their consumer needs.

- NDTV-Toyota 'Greenathon' campaign to support the 'Lighting a Billion Lives' cause, to provide solar power to villages without electricity.
- Toyota PRIUS, the hybrid electric car, is another effort in the green space.

- Hindustan Unilever's 'Save Water' Campaign is yet another, with the company deciding to launch products that consume less water.

Social Responsibility:

Many firms are beginning to realize that they are members of the wider community and therefore must behave in an environmentally responsible manner. This translates into firms that believe they must achieve environmental objectives as well as profit related objectives. This results in environmental issues being integrated into the firm's corporate culture. Coca-Cola has invested large sums of money in various recycling activities, as well as having modified their packaging to minimize its environmental impact. While being concerned about the environment, Coke has not used this concern as a marketing tool. Thus many consumers may not realize that Coke is a very environmentally committed organization.

Governmental Pressure:

As with all marketing related activities, governments want to "protect" consumers and society; this protection has significant green marketing implications. Governmental regulations relating to environmental marketing are designed to protect consumers in several ways, 1) reduce production of harmful goods or by-products; 2) modify consumer and industry's use and/or consumption of harmful goods; or 3) ensure that all types of consumers have the ability to evaluate the environmental composition of goods. The Trade Practices Act 1974 (the Act) states that businesses must not mislead or deceive consumers in any way, and it carries serious penalties for businesses that fail to meet these requirements

Competitive Pressure:

Another major force in the environmental marketing area has been firms' desire to maintain their competitive position. In many cases firms observe competitors promoting their environmental behaviors and attempt to emulate this behavior. In some instances this competitive pressure has caused an entire industry to modify and thus reduce its detrimental environmental behavior. For example, it could be argued that Xerox's "Revive 100% Recycled paper" was introduced a few years ago in an attempt to address the introduction of recycled photocopier paper by other manufacturers. In another example when one tuna manufacture stopped using driftnets the others followed suit [Advertising Age 1991].

Cost Or Profit Issues:

Firms may also use green marketing in an attempt to address cost or profit related issues. Disposing of environmentally harmful by-products, such as polychlorinated biphenyl (PCB) contaminated oil are becoming increasingly costly and in some cases difficult. Therefore firms that can reduce harmful wastes may incur substantial cost savings. When attempting to minimize waste, firms are often forced to re-examine their production processes. In these cases they often develop more effective production

 ISBN: 978-81-910118-7-6

processes that not only reduce waste, but reduce the need for some raw materials. This serves as a double cost savings, since both waste and raw material are reduced.

Strategies for Green Marketing:

Green Marketing – To be successful green marketing companies there are a few fundamental rules that will go a long way in shaping the future of the business in the coming years. The fundamental strategy is to use the Four P's suitably modified to meet the needs of Green Marketing, but there are a few points that are needed to be stressed on before embarking on Strategy. They are:

I Customer Focused Strategies-

- Knowing Customer
- Educating customer
- Genuineness & Transparency to customer
- Reassuring Buyer
- Giving customers an opportunity to participate
- Pricing for customer

II. Paperless Documentation:

- **Electronic Press Kit:** For businesses with regular media contact, an electronic press kit puts a big dent into paper usage. Press kits typically include a company history, product brochures, biographies of the company executives, photos and press clips. Companies often send a press kit to every media outlet in the area. A business could convert all of the documents and images into electronic files and offer the kit as a downloadable folder on its website. The electronic press kit requires no paper and no postage. The website could even indicate that the electronic press kit is part of an ongoing effort to reduce the business' environmental impact.
- **E-Newsletters:** Many businesses offer monthly newsletters to their customers. A business can cut paper waste and printing costs, while providing equal or greater levels of content, by shifting over to e-newsletters. In this case, the newsletter itself serves as marketing for the business and the delivery method functions as an easy way to go green.
- **Public Declaration:** A very simple type of green marketing is to make a public announcement, through a press release for example, that the business will pursue green policies. The announcement should include details about the specific changes the business will make and on what time frame. If the changes go off as planned and, particularly, if they reap benefits

like reduced costs, follow public declarations about the change can help to solidify the public perception of the business as green.

III. Supply Chain & Logistics:Electric/Hybrid Vehicles:

Small-business owners often serve as the most visible representative of the business itself. In effect, their public personas function as marketing for the business. If a small business owner tries to rebrand the business as green, but drives a fuel inefficient truck or SUV, the green marketing effort seems deceptive. Switching over to an electric or hybrid vehicle serves as another visible reminder that the business pursues a green policy. IV. Packaging- Green Packaging : Packaging that cannot biodegrade takes up enormous amounts of space in landfills. A business that manufactures and packages products can convert to eco friendly packaging. Converting to biodegradable packaging provides customers with a visible symbol of the company's commitment to "going green." The business can also leverage the eco-friendly packaging as part of its advertising program to help draw in new environmentally conscious customers.

Green Advertising:

Green advertising stresses upon the 86% of Indians report that advertising helps consumers to make better decisions and understand benefits of green products. 57% of them said that TV advertisements have the greatest impact on their likelihood to purchase the green products. (International Journal of Social Sciences & Interdisciplinary Research; Vol.1 No. 1, January 2012, ISSN 2277 3630)

Tide Coldwater Challenge: This landmark marketing campaign addressed the money saved by washing in cold water and the product's deep cleaning and whitening abilities making green the ancillary benefit. The far-reaching campaign included national advertising, in-store programs, product sampling, a strong Internet presence, consumer promotions and strategic alliances. (2005)

Jamie Oliver: Jamie Oliver, the outspoken English Chef and healthy food advocate, is a brand in an unto himself; he uses "disruptive media and public visibility" to communicate and motivate, creating a new kind of "infotainment." (2006)

Diesel Clothing "Global Warming Ready": In print ads promoting its 2007 spring/summer collection, the Italian-based clothing company depicted landscapes transformed by environmental disaster, thus proving that green marketing and tongue in cheek humor, when done well, resonate with young audiences. (2007)

GE EcoImagination: A massive multi-medium campaign for EcoImagination established GE's green position in a competitive marketplace where credibility and believability were paramount to success. The resulting creative was simple, beautiful and compelling and delivered the message in engaging ways. (2008). Ecomagination is GE's commitment to build innovative solutions for today's environmental challenges while driving economic growth.

 ISBN: 978-81-910118-7-6

HSBC "No Small Change": A highly successful campaign elevated HSBC's environmental credentials and consolidated their environmental leadership position; it exceeded all expectations without TV or radio. (2008)

Findings and Conclusions:

- Green marketers have diverse and fairly sizeable segments to cater to.
- Green Marketing being a new concept has got lot of business potential in time to come.
- Many companies in India like AMUL have taken a giants leap in the application and use of Green Marketing in their processes and products.
- PSU's in India have taken an incredible initiative in the promotion of green marketing.
- Government of India has a major share in framing and enacting laws and provisions which adhere to environmental safety. This has resulted in promoting green marketing.
- In corporate sector, India has made a remarkable impact of creating paperless administration, recyclable packaging material, efficient use of fuel and energy, promoting biodiversity and thereby reducing environmental degradation.

Green Marketing has been looked at, as an approach only in industries and society. But, it should be treated as a way of life for the safeguarding the environment leading to survival of life on earth. This paper focuses the basics of green marketing and its present scenario in India. It has the potential of further research in exploiting varied facets of green marketing benefitting everyone.

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Inbound Marketing: An Emerging Digital Marketing Strategy

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Abstract:

India is one of the top retailing markets in the world and among the fastest growing. Business and marketing activities are affected by Internet technologies and it is revolutionizing commerce, marketing, retailing, and advertising activities. There are attractive attributes of Internet to companies on time and money saving, convenience, selection from a wide range of alternatives, and availability of information and marketing activities. E-commerce and e-marketing are the two important terms in the new Internet-based business domain. E-commerce is a way of conducting business through electronic transactions. E-marketing is the promotion of products or services through Internet whereas; e-tailing is selling products and services by using Internet.

Key Words: *E-commerce, marketing strategies, E-tailing, E-marketing, Inbound marketing*

Introduction:

The number of Internet users worldwide reached 7.1 billion in 2013, almost exactly twice what it was in 5 years ago, 1.15 billion. We all know the Internet is big, but this kind of growth really puts things into perspective. The Internet population has been swelling rapidly since the arrival of the World Wide Web (which rests firmly on top of the foundation provided by the Internet). Its human nature to get used to changes, so most of us have a tendency to forget how rapidly the world has changed, and keeps changing. And as the Internet population grows, so does the potential size of online services. Internet marketing involves the usage of the internet to market and sell goods and services. .The Internet has drastically altered the way in which information is shared, and has had a profound impact on marketing. Since 2010 there has been an increase by 162.73% of internet users and the numbers are still increasing. One example of this extreme evolution is Facebook. Last year we noted that Facebook now has more users than the entire Internet had back in 2004, the year the social network was founded.

Essentially, Internet marketing is using the Internet to do one or more of the following:

- Communicate a company's message about itself, its products, or its services online.
- Conduct research as to the nature (demographics, preferences, and needs) of existing and potential customers.

 ISBN: 978-81-910118-7-6

- Sell goods, services, or advertising space over the Internet.

Internet marketing uses the Internet to deliver promotional marketing messages to consumers. The various strategies used by marketers is email marketing, search engine marketing, social media marketing, many types of display advertising (including web banner advertising), and mobile advertising. Online advertising is widely used across virtually all industry sectors.

Literature review:

Marketing strategies have been changing since the development of the internet and some elements of the marketing mix are affected and evolving with the new technologies, particularly the promotional element. It is important to understand the evolution of marketing and what has changed in terms of strategies thanks to the internet and the new communication tools it offers.

- Internet Marketing: as Susan Ward, business writer, says, "Internet marketing refers to the strategies that are used to market a product or service online, marketing strategies that include search engine optimization and search engine submission, copywriting that encourages site visitors to take action, web site design strategies, online promotions, reciprocal linking, and email marketing – and that's just hitting the highlights." (About.com, 2012).
- Margaret Rouse, writer and manager of the website WhatIs.com, TechTarget's IT encyclopedia and learning center, defines social media marketing as "a form of Internet marketing that utilizes social networking websites as a marketing tool" in order to "produce content that users will share with their social network to help increase brand exposure and broaden customer reach". (WhatIs.com, March 2011).
- Internet marketing (IM) is also known as digital marketing, web marketing, online marketing, or e-marketing. As the name states, it is the advertising of products or services over the Internet. However, it also implies marketing through the wireless media and through e-mail. Electronic customer relationship management (ECRM) systems are also categorized under Internet marketing. IM can be creative, as well as, technical through its design, development, advertising, and sales over the Internet. This paper is a secondary research regarding how E-commerce gradually forms part of our daily lives. It concerns different aspect of advertising in terms of electronic commerce (2011 International Conference on Software and Computer Applications IPCSIT vol.9 (2011)© (2011)IACSIT Press, Singapore).
- Smith and Chaffey (2005) gave a short and basic definition of Internet marketing as "Achieving marketing objectives through use of electronic communication technology".
- According to Hoge (1993), Internet

marketing is the transfer of goods or services from seller to buyer that involves one or more electronic methods or media.

- Strauss and Ansary (2006) defined Internet marketing in their latest book as the use of information technology in the process of creating, communicating, and delivering value to customers, and for managing customer relationships in ways that benefit the organization and its stake holders.
- Internet marketing is defined as the application of the Internet and related digital technologies in conjunction with traditional communications to achieve marketing objectives (Chaffey, D., Ellis-Chadwick, F., Johnston, K. and Mayer, R. 2006, 8).
- Internet Advertising: It is a form of advertising that uses the Internet to attract customers by delivering messages through websites or advertising banners on other popular websites which leads online users to a company site. The company website must be well-organized, well-designed and user-friendly in order to attract more target customers (Rowley, 2001).

The Indian E-Commerce:

India's Internet base, already the third largest in the world after China and the US, is growing by 40 per cent a year.According to a recent TechnoPak report, e-tailing has the potential to grow more than hundred-fold in the next 9 years, to reach $76 billion by 2021. This growth will be driven by the country's growing Internet-habituated consumer base, which will comprise 180 million broadband users by 2020, and a burgeoning class of mobile Internet users. India's Internet base, already the third largest in the world after China and the US, is growing by 40 per cent a year.(Economic Times, 2013)

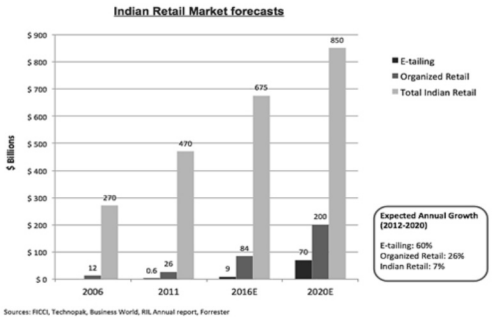
Travel is the biggest e-commerce category online. It is a myth that Indians don't want to use their cards online as many urban Indians are getting good deals and buying from e-commerce sites.

Key drivers to e-commerce:

- Increasing broadband Internet (growing at 20%MoM) and 3G penetration.
- Rising standards of living and a burgeoning, upwardly mobile middle class with high disposable incomes
- Availability of much wider product range (including long tail and Direct Imports) compared to what is available at brick and mortar retailers.
- Busy lifestyles, urban traffic congestion and lack of time for offline shopping
- Lower prices compared to brick and mortar retail driven by disintermediation and reduced inventory and real estate costs
- Increased usage of online classified sites, with consumers buying/selling second-hand goods
- Evolution of the online marketplace model with sites like eBay,Flipkart, Snapdeal, Infibeam,qnetindia.in and Tradus. The evolution of ecommerce

 ISBN: 978-81-910118-7-6

has come a full circle with marketplace models taking center stage again.



The challenges to ecommerce industry

- Enablers of Growth - Technology, Infrastructure, Payment Solutions etc.
- New Business Models for Retailers.
- Shift from Web to Mobile.
- Back-End Systems.

The challenges will lead us to solutions and hence this is a critical phase in the evolution of the e-commerce industry in India.

In the era of globalization, companies are using the Internet technologies to reach out to valued customers and to provide a point of contact 24 hours a day, 7 days a week. E-commerce and e-marketing are the two important terms in the new Internet-based business domain.Wang (2002) has provided a broad definition of e-tailing by defining it as the selling of goods and services to the consumer market via the internet.

According to Turban et al. (2006), e-tailing is defined as retailing conducted online, over the internet. In general, the activities of e-tailing encompass three main activities. They are:

- a product search facility (often referred as a product evaluation or information gathering facility),
- an on-line purchase function and
- a product delivery capability

The New Mantra for Digital Marketing - Inbound marketing

Inbound marketing is the new age fundamental marketing model which is all about discovery by the customers, based on the customer's interest in a product or service. Instead of the old outbound marketing methods of buying ads, buying email lists, and praying for leads, inbound marketing focuses on creating quality content that pulls people toward your company and product, where they naturally want to be. By aligning the content you publish with your customer's interests, you naturally attract inbound traffic that you can then convert, close, and delight over time. By 2016, it is estimated that inbound marketing will represent around 26% of all advertising budgets put together. Moreover, inbound marketing is highly interactive and comes with a promise of added value to target customers.

Major themes:

- **Content Creation:** Creating targeted content that answers your customer's basic questions and needs, and you share that content far and wide.
- **Lifecycle Marketing:** Recognizing that people go through stages as they interact with your company, and that each stage requires different marketing actions.
- **Personalization:** Better personalized messages to specific needs.
- **Multi-channel:** Inbound marketing is multi-channel by nature because it approaches people where they are, in the channel where they want to interact with you.
- **Integration:** publishing and analytics tools all work together like a well-oiled machine, allowing you to focus on publishing the right content in the right place at the right time.

The Four Marketing Actions:

1. Attract

We don't want just any traffic to our site, we want the right traffic. We want the people who are most likely to become leads, and, ultimately, happy customers. Who are the "right" people? Our ideal customers, also known as our buyer personas. Buyer personas are holistic ideals of what your customers are really like, inside and out. Your personas are the people around whom your whole business is built.

Some of the most important tools to attract the right users to your site are:

- Blogging: Inbound marketing starts with blogging. A blog is the single best way to attract new visitors to your website. In order to get found by the right prospective customers, you must create educational content that speaks to them and answers their questions.
- Social Media: Sharing remarkable content and valuable information on the social web, engage with your prospects, and put a human face on your brand. Interact on the networks where your ideal buyers spend their time.
- Keywords: Customers begin their buying process online, usually by using a search engine to find something they have questions about. So making sure of appearing prominently when they search. To get there, one needs to be

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careful, analytically pick keywords, optimize pages, create content, and build links around the terms your ideal buyers are searching for.

- Pages: Optimize your website to appeal to and speak with your ideal buyers. Transform your website into a beacon of helpful content to entice the right strangers to visit your pages.

2. Convert

Once visitors come to your site, the next step is to convert those visitors into leads by gathering their contact information. At the very least, one needs their email addresses. Contact information is the most valuable currency there is to the online marketer. In order for visitors to offer up that currency willingly, one needs to offer them something in return. That "payment" comes in the form of content, like eBooks, whitepapers, or tip sheets -- whatever information would be interesting and valuable to each of your personas.

Some of the most important tools in converting visitors to leads include:

- Calls-to-Action: Calls-to-action are buttons or links that encourage visitors to take action, like "Download a Whitepaper" or "Attend a Webinar." If one doesn't have enough calls-to-action or your calls-to-action aren't enticing enough, one won't generate any leads.
- Landing Pages: When a website visitor clicks on a call-to-action, they should then be sent to a landing page. A landing page is where the offer in the call-to-action is fulfilled, and where the prospect submits information that your sales team can use to begin a conversation with them. When website visitors fill out forms on landing pages, they typically become leads.
- Forms: In order for visitors to become leads, they must fill out a form and submit their information. Optimize your form to make this step of the conversion process as easy as possible.
- Contacts: Keep track of the leads you're converting in a centralized marketing database. Having all data in one place helps you make sense out of every interaction you've had with your contacts -- be it through email, a landing page, social media, or otherwise -- and how to optimize your future interactions to more effectively attract, convert, close, and delight the buyer personas.

3. Close

Once you've attracted the right visitors and converted the right leads, but now you need to transform those leads into customers. How can you most effectively accomplish this feat? Certain marketing tools can be used at this stage to make sure you're closing the right leads at the right times.

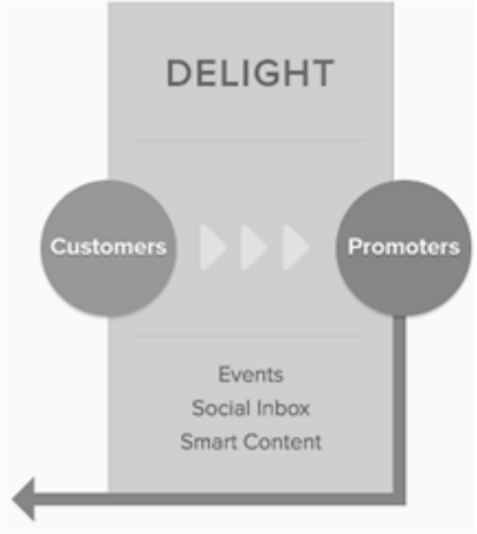
Closing tools include:

- Lead Scoring: You've got contacts in your system, but how do you know which ones are ready to speak to your sales team? Using a numerical representation of the sales-readiness of a lead takes the guesswork out of the process.
- Email: What do you do if a visitor clicks on your call to action, fills out a landing page, or downloads your whitepaper, but still isn't ready to become a customer? A series of emails focused on useful, relevant content can build trust with a prospect and help them become more ready to buy.
- Marketing Automation: This process involves creating email marketing and lead nurturing tailored to the needs and lifecycle stage of each lead. For example, if a visitor downloaded a whitepaper on a certain topic from you in the past, you might want to send that lead a series of related emails. But if they follow you on Twitter and visited certain pages on your website, you might want to change the messaging to reflect those different interests.
- Closed-loop Reporting: How do you know which marketing efforts are bringing in the best leads? Is your sales team effectively closing those best leads into customers? Integration with your Customer Relationship Management (CRM) system allows you to analyze just how well your marketing and sales teams are playing together.

4. Delight

The Inbound way is all about providing remarkable content to our users, whether they be visitors, leads, or existing customers. Inbound marketers continue to engage with, delight, and (hopefully) upsell their current customer base into happy promoters of the companies &products they love.

 ISBN: 978-81-910118-7-6



Tools used to delight customers include:

- Smart Calls-to-Action: These present different users with offers that change based on buyer persona and lifecycle stage.
- Social Media: Using various social platforms gives you the opportunity to provide real-time customer service.
- Email and Marketing Automation: Providing your existing customers with remarkable content can help them achieve their own goals, as well as introduce new products and features that might be of interest to them.

A New Methodology:

The new Inbound Marketing Methodology covers each and every step taken, tool used, and lifecycle stage traveled through on the road from stranger to customer. It empowers marketers to attract visitors, convert leads, close customers, and delight promoters. The new methodology acknowledges that inbound marketing doesn't just happen, you do it. And you do it using tools and applications that help you create and deliver content that will appeal to precisely the right people (your buyer personas) in the right places (channels) at just the right times (lifecycle stages).

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ISBN: 978-81-910118-7-6

Testing Weak Form Efficiency of Indian Stock Market – An Empirical Study on NSE

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Abstract:

The Efficiency Market Hypothesis (E M H) has been consented as one of the cornerstones of modern financial economics. The term "efficiency market" in financial literature in 1965 as one in which security prices fully reflect all available information .The market is efficient if the reaction of market prices to new information should be instantaneous and unbiased.

Like its foreign counterparts, Indian stock market is also affected badly by the financial crisis of recent times. Last five years have seen several crashes in the stock market followed by unprecedented volatility. Millions of the investors' money have wiped out in seconds. In this context, the issues of efficiency of the Indian stock market have again become relevant at all levels. With this backdrop, the present study attempts to reinvestigate the true level of information efficiency of Indian stock exchanges, with a special reference to National Stock Exchange.

The paper is to empirically study on testing weak form efficiency of Indian stock market – with special reference to NSE. The objective of the study is to check whether NSE is efficient in weak form of market. The study is analytical in nature and used secondary data analysis to attain its objectives. The secondary data is collected from the official website if nseindia. com covering the last fourteen five years from January 2000 to December 20132008-09 to 2012-13. Various other reports like magazines, journals, published books and official websites are also referred to for the present study. The statistical techniques applied for data analysis in the present study are run and auto correlation tests. The results depicts that NSE is inefficient in weak form of market.

Introduction:

The Efficiency Market Hypothesis (E M H) has been consented as one of the cornerstones of modern financial economics. we first defined the term "efficiency market" in financial literature in 1965 as one in which security prices fully reflect all available information .The market is efficient if the reaction of market prices to new information should be instantaneous and unbiased .Efficiency Market Hypothesis is the idea that information is quickly and efficiently incorporated into asset prices at any point in time, so that old information cannot be used to foretell future price movement.

Like its foreign counterparts, Indian stock market is also affected badly by the financial crisis of recent times. Last five years have seen several crashes in the stock market followed by unprecedented volatility. Millions of the investors' money have wiped out in seconds. In this context, the issues of

 ISBN: 978-81-910118-7-6

efficiency of the Indian stock market have again become relevant at all levels.

With this backdrop, the present study attempts to reinvestigate the true level of information efficiency of Indian stock exchanges, with a special reference to National Stock Exchange being the greatest and public limited registered stock exchange of the country.

Market Efficiency – Conceptual Aspect:

Definition of Market Efficiency:

Market efficiency, in its true sense can be operational, allocation or informational. However the one most interesting and debatable is the informational efficiency. An efficient capital market is defined as one in which security prices always adjust instantaneously and in an unbiased manner to any new information becoming known to the market, thus leaving no scope for any market participant to earn above normal return on a consistent basis over a long period of time.

Forms of Market Efficiency:

Depending upon the information set that is fully reflected in security prices, Eugene Fama (1970) classified efficient capital markets into the following three forms:

a. Weak Form Efficiency

The information set available in such a market is past sequence of security prices. Since past price data cannot be used to predict future security prices as these are already impounded in the stock prices, evidences on random walk hypothesis (i.e. independence of successive price changes) would generally confirm the weak form of efficiency in capital markets.

b. Semi-strong form efficiency

The semi-strong form of efficient capital market hypothesis says that stock prices adjust to all information both past information and also other publicly available information such as annual earnings announcements, stock splits, interim dividend etc. This implies that using publicly available information investors will not be able to earn superior risk adjusted returns.

C. Strong form efficiency

The information set available in such a market is all information both publicly available and inside information and strong form of efficiency will imply that the stock price will incorporate all those information.

Since different forms or levels of efficiency require progressively more amount of information impoundment, various customised test techniques are applied to confirm such forms

Implications Market Efficiency:

The concept of market efficiency useful in different ways.

a. An Analyst's Perspective:

- Technical analysis based on the chartist techniques is completely useless if the market is efficient in the weak form.
- If the market is efficient in the semi-strong form, trading strategies

based on even publicly available price sensitive information will yield no excess return.

b. An Investor's Perspective:

- If market is efficient chance of gain and loss is 50:50. Therefore, so long the efficiency is maintained an average investor should simply select a suitability diversified portfolio, thereby avoiding cost of analysis and transaction.

c. A Corporate Manager's Perspective:

  - If the market is efficient any manipulation in accounting treatments will be property interpreted by the investors and analysts. Hence, earnings management will be of no use.
  - If the market is efficient the timing of security issue does not have to be fine-tuned.

d. Societal Perspective:

  - An efficient market will always ensure capital flow to the most optimal use.

Literature Review:

The history of researches on market efficiency is almost a century old. Innumerable studies had been conducted around the world on this issue. In India also a systematic endeavor was seen in this respect as early as 1970s. since then issue of market efficiency has been researched in India providing considerable evidence that Indian stock market, if not in semi-strong form, is efficient in weak form is this respect Barura (1980-1987). Sharma (1983). Ramchandran (1985). Sharma and Kennedy (1977), Gupta (1985) been a few studies also for example, by Kulkarni (1978) and Choudhury (1991) which did not support the weak form efficiency.

However, in a few recent studies P. Srinivasn (2012). Das and Pattanayak (2011), P.K. Mishra and Gupta & Siddikiargued that advanced test results of a few well known indices showed considerable departure from randomness.

The issue of semi-strong form of efficiency was taken up for research from mid 1980s. the evidences on this issue, however are mixed Ramchandran (1985) and Srinivasan (1988) found that the market is by and large efficient in responding to the information content of bonus issue and right issues respectively, Dixit (1986) showed that dividend is the most important determinant of the share prices. However Barda and Ragbunathan (1990), Sundaram (1991), Obaidullah (1991), Sinha ((19992) cast doubts on whether the observed price a\earnings rations are consistent with the fundamental factors like dividend growth and payment rations. Moreover Barua and Raghunathan (1986) provide evidence of the systematic mispricing of the convertible securities in violation of the risk-return parity and argue that this represent and arbitrage opportunity.

On strong form efficiency there is hardly and notable study as Indian stock market can hardly be expected to the efficiency in the strong form mainly because of its limited size, less stringent regulations to avoid insider trading mechanisms etc.

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Thus is appears that there is no consensus among the researches regarding the true level of market efficiency achieved be the Indian stock market. Further the recent turmoil and resultant increased volatility of stock exchange have put a question mark on the efficiency of Indian stock exchange to a great extent. This provides us the impetus to reinvestigate the issue of market efficiency of Indian stock market.

Meredith beechry,David,Gruen,James,Vickery.The efficient market hypothesis states that assets prices in financial market should effect all available information; as a consequence prices should always be consistent with fundamentals.

The paper discusses the main ideas behind the efficient market hypothesis and provided a guide as to which of its predictions seem to be borne out by empirical evidence and which do not. The evidence suggests that it cannot explain some important and worrying features of asset market behaviour. Investors' inconsistency, transaction cost and unavailable information may all be source of market inefficiency, study their impact, as well as the influences of other conditions on the development of prices in the primary goal in the empirical literature.

Objective of the study:

1. To check whether National Stock Exchange is in weak form of efficiency considering a long period data applying detail statistical analysis.

Hypotheses: Run and Auto correlation tests are used at 95% confidence level to know whether National Stock Exchange is efficient in weak form of market

I. Run test:

Null Hypothesis (HO) – price change is random.

Alternative Hypothesis (H1) – price change is not random.

II. Auto Correlation Test:

Null Hypothesis (HO) – There is no serial correlation.

Alternative Hypothesis (H1) – There is serial correlation.

Methodology:

For the purpose of this study, NSE popular index known as S&P CNX Nifty was considered. The reason for selecting this index is that it sufficiently captures the mood of the market. To reach index under study, a sample period starting from January 2000 to December 2013 was considered. Monthly closing index values under study were collected for the above said period.

The return is calculated as the logarithmic difference between two consecutive prices in a series, yielding continuously compounded returns. The reasons behind considering logarithmic return are justified by both theoretically and empirically. Theoretically, logarithmic returns are analytically more tractable while linking returns over longer time intervals. Empirically, logarithmic returns are more likely to be normally distributed which is prior condition of most standard statistical techniques. Daily index returns (Rm.t) are calculated as.

Rm.t = Ln (It / It 1)

Where, R t = return at period t, It = index at period t and t-1 = index at period t-1

Ln = natural log.

Statistical test techniques are applied on the return series using various statistical packages like SPSS in addition of Excel 2007.

Test Techniques Applied:

Since weak form efficiency necessarily imply that past price information cannot be used to predict future security price as these are already impounded in the stock prices, evidences on random walk hypothesis (i.e. independence of successive price changes) would generally confirm in the weak form of efficiency in capital markets. Therefore tests of randomness of return series have been considered as extremely useful over the years in assessing weak form of market efficiency. In this study we have used both parametric Serial Correlation Test and non-parametric Run Test to judge random behaviour of index returns under study.

I. Run Test

A "run" of a sequence is a maximal non-empty segment of the sequence consisting of adjacent equal element. For example, the sequence "++++---+++-------++++++----"consists of six runs, three of which consist of +s and the other of –s. If +s and –s alternate randomly, the number of runs in the sequence N for which it is given that there are N+ occurrences of + and N- occurrence of –(so N=N+ + N-) is a random variable whose conditional distribution – given the observation of N+ positive runs and N- negative runs is approximately normal with mean (μ) and standard Deviation (σ).

These parameters do not depend on the "fairness" of the process generating the elements of the sequence in the sense that +s and –s must have equal probabilities, but only on the assumption that the element are independent and identically distributed. The hypothesis of statistical independent of the elements may be rejected.

Runs test can be used to test

1. The randomness of a distribution, by taking the data in the given order and marking with + the data greater than the median (Numbers equalling the medians are omitted)
2. Whether a function fits well to a data set, by marking the data exceeding the function value with + and other data with-. For this use, the runs test, which takes into account the signs but not the distances, is complementary to the chi-square test, which takes into account the distances but not the sings.

Run test statistics is a kind of non-parametric statistical test that checks a randomness hypothesis for a two –valued data sequences. More precisely, run test can be used to test the hypothesis that the elements of the sequence are mutually independent one. A run of a sequence is defined as a maximal non-empty segment of the data sequence consisting of adjacent equal element.

 ISBN: 978-81-910118-7-6

Run test can be used to perform

- Randomness of a distribution is found by taking the data in the given form or order and marking with + the data greater than the median and with – the data less than the median.
- Numbers which equal the median get omitted.
- It checks whether a function fits well to a data set values, by marking the data exceeding the function value with +and the other data with –. It mainly depends on signs.
- If the number of runs falls outside the interval of universally accepted is μ+-1.96, then it is reasonable to reject the hypothesis and that the curve is a good description of the data.

Mean= {[2(N+) (N-)]/N} +1

Variance σ2= {2N+N– (2N+N-N)}/ {N2 (N–1)} = {(μ-1) (μ-2)}/ (N-1)

Where

N=(N+)+(N-)

N+= positive runs or number of occurrences of +s

N-=negative runs or number of occurrences of –s

If the sample size is unequal and either n1 and n2 is larger than 20, or if the sample size is equal and large than 100, then the test statistical is

Z= {r-(2 n1 n2)/ (n1 + n2) +1}/ {(2 n1 n2 (2 n1 n2- n1- n2))/ (n1+ n2)1/2(n1+ n2-1)} 1/2

Where r (test statistic) is the number of runs or average of the most and fewest runs.

In this study, Run test has been applied on the index return series with cut off point k= median. The hypothesis is that actual number of runs, thereby confirming the presence of weak form efficiency.

II. Serial / Auto Correlation Test:

Serial correlation (also called Auto-correlation) measures the correlation between price changes in consecutive time period. Hence, a serial correlation that is positive and statistically significant could be viewed as evidence of price momentum in markets and would suggest that returns in a period are more likely to be positive (negative) if the prior period's returns were positive (negative). Similarly a negative serial correlation, which is statistically significant, could be an evidence of price reversals. **But if the serial correlation is found to be zero or statistically insignificant, it will confirm independence of successive price changes and will evident weak form efficiency of the market.**

In this study, we have used serial correlation test with **null hypothesis that the autocorrelation coefficients are equal to zero (implying that NSE is efficient) against the alternative that they significantly deviate from zero (implying that it is inefficient).**

Serial/Auto correlation function for the series Yt is measured by the formula;

$$ACF(k) = \frac{\sum_{(t=k-k)}^{n} (yt - \bar{y})(yt - k - \bar{y})}{\sum_{(t=1)}^{n} (yt - \bar{y})^2}$$

The standard error of ACF (k) is given by:

$$Se_{ACF(k)} = \frac{1}{\sqrt{(n-k)}}$$

When n is sufficiently large i.e. n>50, it is reduced to

$$Se_{ACF(k)} = \frac{1}{\sqrt{(n)}}$$

To test whether ACF (k) is significantly different from zero, we have used t statistic where

$t = ACF(k)ISe_{ACF(K)}$

Further to test the joint hypothesis that all autocorrelations are simultaneously equal to zero, the Ljung-Box portmanteau statistic (Q) is used. The Ljung-Box Q statistics are given by:

$$Q^* = T(T+2)\sum_{k=1}^{m}\frac{\hat{r}_k^2}{T-k} \sim \chi_m^2$$

Where tk(k)is the autocorrelation, T is the number of observations and m is the maximum lag. Under the null hypothesis of zero autocorrelation at the first m autocorrelations (r1 = r2 = r3 = … = rm = 0), the Q-statistic is distributed as chi-squared with degrees of freedom equal to the number of auto corrections (k).

Empirical Results:

1. Run Tests:

The run tests convert the total number of runs into a Z statistic. For large samples the Z statistic gives the probability of difference between the actual and expected number of runs. The Z values is greater than or equal to + 1.96 or prob. value less than 0.05 rejecting the random walk hypothesis at 5% level of significance. The index depicts that the successive price changes are not independent and the series is not random since its Z value (2.012) is greater than 1.96 as well as prob. value is 0.044 which is less than 0.05. Hence, it rejects null hypothesis that there is random series.

2. Serial/ Auto Correlation Test:

The results of serial correlation test have been incorporated. Our analysis reveals that auto-correlations are significant at 5% level in a quite few cases for index. For S&P CNX Nifty, auto-correlations are significant for 3, 4, 8, 11, 14, 17,19,24,25,26,27,37,40, and 42th lag. Thus almost 3333% of the 168 auto corrections calculated are significant at 5% level. The index exhibits significant correlations which are in clear contradiction of our assumption of zero and insignificant auto-correlation of returns at different lags. However, the results are not conclusive enough as all lags do not show significant auto-correlation. Hence, as a confirmatory analysis, findings of Ljung-Box portmanteau statics (Q) can be considered useful in this respect. Our analysis shows that Q statistic is significant (with p value>0.531) at 5% level for all lags. It is also revealed from the

 ISBN: 978-81-910118-7-6

graphical representation that the data lies within those lines and hence, there is no serial correlation. This clearly rejects the joint hypothesis that all the auto correlations are simultaneously zero and insignificant. Thus the results exhibit clear departure from the random walk assumption. Hence, NSE can never be considered efficient in the weak form.

Conclusion:

The assumption of random walk is central to the existence of a weak form efficient market. This study has attempted to test such phenomenon in National Stock Exchange being of representative of Indian stock market with the help of Serial correlation test (along; with Q statistic) and non-parametric Run test. But the results of both the tests clearly indicate that the return series from the selected index S&P CNX Nifty from NSE do not show any sign of random behaviour and significant dependence do exist among the returns of various time periods. Thus, it will not be wrong to conclude that NSE in specific and hence Indian stock market at large are inefficient in the weak form of market efficiency implying that it is not impossible for investors to consistently earn above normal return with the help of any properly designed trading strategy based on past price movements. This will help for prediction and hypothesis testing.

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Appendix1- Runs Test

			monthly Index Returns
Test Valuea			-.0098
Cases < Test Value			84
Cases >= Test Value			84
Total Cases			168
Number of Runs			98
Z			2.012
Asymp. Sig. (2-tailed)			.044
Monte Carlo Sig. (2-tailed)	Sig.		.050[b]
	95% Confidence Interval	Lower Bound	.046
		Upper Bound	.054

a. Median

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 2- Autocorrelations

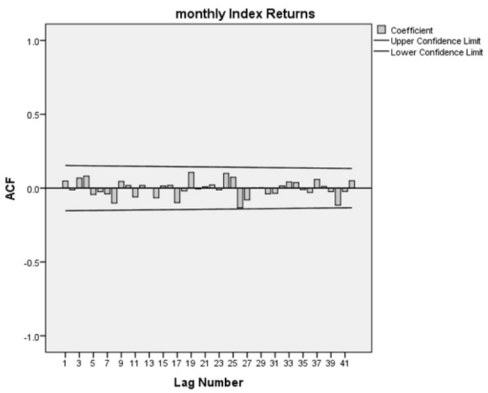
Series: monthly Index Returns

ISBN: 978-81-910118-7-6

Lag	Autocorre-lation	Std. Errora	Box-Ljung Statistic		
			Value	df	Sig.b
1	.048	.076	.393	1	.531
2	-.012	.076	.419	2	.811
3	.068	.076	1.215	3	.749
4	.081	.076	2.364	4	.669
5	-.043	.076	2.688	5	.748
6	-.024	.075	2.787	6	.835
7	-.039	.075	3.057	7	.880
8	-.102	.075	4.903	8	.768
9	.045	.075	5.271	9	.810
10	.018	.074	5.329	10	.868
11	-.060	.074	5.976	11	.875
12	.018	.074	6.034	12	.914
13	-.001	.074	6.034	13	.945
14	-.065	.073	6.829	14	.941
15	.015	.073	6.870	15	.961
16	.019	.073	6.935	16	.975
17	-.098	.073	8.764	17	.947
18	-.019	.072	8.834	18	.963
19	.106	.072	10.998	19	.924
20	-.005	.072	11.003	20	.946
21	.009	.072	11.019	21	.962
22	.022	.071	11.112	22	.973
23	-.011	.071	11.137	23	.982
24	.100	.071	13.112	24	.964
25	.073	.071	14.186	25	.958
26	-.133	.071	17.740	26	.885
27	-.080	.070	19.029	27	.869
28	.000	.070	19.029	28	.897
29	.002	.070	19.029	29	.921
30	-.039	.070	19.343	30	.933
31	-.036	.069	19.606	31	.944
32	.015	.069	19.656	32	.957
33	.042	.069	20.022	33	.963
34	.038	.068	20.328	34	.969
35	-.010	.068	20.350	35	.977
36	-.030	.068	20.540	36	.982
37	.058	.068	21.273	37	.982
38	.012	.067	21.305	38	.987
39	-.023	.067	21.420	39	.990
40	-.116	.067	24.402	40	.975
41	-.021	.067	24.506	41	.981
42	.050	.066	25.073	42	.982

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.



Effects of Packaging on Consumer Buying Behavior

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Abstract:

The intention of this study is to analyze that how packaging influences the consumer buying behaviour.This research is conducted in Pune city using primary data to understand consumer behaviour.Basicintention for the conducting this study is to identify those element such element behind the success of packaging .The aim of this research conducting is to find out that how much the independent variables influence the dependent variable. The consumer buying decision is strongly based on packaging and its features .We predict that packaging colour, packaging material, background image, design of the wrapper, printed information, innovations, font style. Due to rapidly changing life style, people are interesting in packaging because the packaging insure the people that the product is original and the producer used the packaging as a purpose for the easy delivery, for the safety purposes and also used as a tool of sale promotion. Packaging is important element in sense of the sale promotion as well as treated one of the most important factors to influence the customer buying decisions.

Key Words: *Packaging, consumer, buying, behaviour.*

Introduction:

In the past time primary purpose of packaging was to defend the product, but currently according the varying marketing environments packaging is being used as an instrument for increasing sales, attracting customers and product communication to its consumers. Now days Role of Packaging has change due to increasing changes in the consumer desires. More companies are interested in packaging as a tool to increase their sales.

A good packaging helps to identify product to the consumers. Packaging is used for easily delivery and safety purpose. The producer use the packing for the consumer satisfaction that the product is original means that the product is new. They also use for the promotional purposes as well as to differentiate the product from other brand. Rundh said in 2005 that good packaging catch consumer's perception about specific products. In 2004 Silayoi & Speeces aid that package works as a tool for differentiation the brand. In 2007 wells Farley& Amerstrongs aid that packaging is use for marketing communication purposes and they are the important element which influences the buying behavior of the individual.

Packaging is concerned with designing and producing of appropriate packages for a product. The significance of packing has

 ISBN: 978-81-910118-7-6

increased these days because of severe competition in the markets and rise in the standard of the living of people, good packaging protects the products on its route from the seller to the buyer and in some cases even during its life with the user. Packaged goods are generally more convenient to handle. Packaged facilitates the sale of the products. It acts as a silent salesman to the manufacturers particularly at a place where there is widespread use of self service, automatic vending and other self selection method of retail selling. Sometimes, packages are duly sealed to endure products of right quality to the consumers.

Importance of packaging: Packaging sets the tone of the product; it conveys the personality and image of any product. The days that you could just stuff your product in a paper box or plastic bag are over. Today, most consumers judge and decide to purchase a product by its packaging. Attractive, creative packaging gives your product perceived added value.

- Aids in brand identification and recognition
- Helps your product and brand name stand out
- It's a form of advertising in itself
- Innovative packaging will make the consumer to notice your product which results in purchasing your product over others.

The Bottom line is when consumers decide which product to purchase, the packaging of a product can influence the decision. An attractive packaging is crucial in order to get the first time buyers to buy your products. Without attractive packaging who would buy the product in order to try it. Your first step to enter the market is crushed if the packaging is not right.

Literature Review:

According the (Kotler et al. 1998) in the past the primary objective of packaging was to prevent the product but this concept was now changing. In the Marketing environment packaging is been used as a tools for promotional activities and attracting customers and communicating the product to the consumers. In 1999 Goldberg et al. says that image on the product is important so that they increase the attention and increase familiarity with the particular product. Due to increasing self-service and changing consumers' lifestyle the interest in package as a tool of sales promotion and stimulator of impulsive buying behavior is growing increasingly.

In 2001 under Wood, Klein& Burke package add single value to the product. In 2003 according to the study of P.H.K. Prathiraja and A.Ariyawardana, the Consumer can easily pay something additional for that information which is on the food stuffs.According to Panwar (2004) Packaging is the act of containing, protecting and presenting the contents through the long chain of production, handling and transportation to their destinations in as good a state, as they were, at the time of production Packaging is an important part of the branding process as it plays a role in communicating the image and identity of a company. In 2004 Silayoi&Speece said that

package play important rule to differentiate with a variety of similar products.

Alice Louw in 2006 says that packaging is also important in the marketing environment. According to him the best packaging leave the good image of the product in the consumer's mind.Packaging must be functional, it must be protect the products in storage, transferring and also in used. Another function is to given the customers the ease access and used on the purpose of convenience.In the views of Morgan & Adelina Broadbridge (2007), they study the behavior of consumers and their perception of the children products. This research will not help the marketer in bringing innovation and creativeness into the packaging of the product but will also provide the policy makers in implementing the effective decision in bringing changes and creating strategy and packaging. This study will contribute through quantitative research. In 2007 Renaud LUNARDO find out that the information on the win consumers have great effect which influence mostly the young generation and there purchasing behavior. In 2007 wells Farley & Amerstrong said that they play important role in effect consumer buying decision.They use Quantity as well as quality research methodology. They use the population where all the children were they have less than five year of age.Their research result shows that the consumer thinks that if the packaging is attractive then the product will be reliable and have a good performance.

PiresGon,calves, Ricardo (2008) has much work on the feature of the perception and value of the product. According to him packaging help in choosing in choosing the product when there is a lot of uncertainty and thus they trust on good attribute of the product packaging For the purpose of this study four elements has been selected packaging color, design, innovation, printed information. The main aim is to identify the purchasing power of consumer. According to paper work of Liang lu 2008 he says that packaging as a good tool for the product. According to the University Of Halmsted School that packaging is useful for practical purposes as well as for communication of those information which is on the product that not serves a functional purpose but it will also use as amean of the communication of the information the products and brand character. PiresGon, calves, Ricardo(2008) has much work on the feature of the perception and value of the product. In Dec. 2008 BebNath Sharma studied new consumer products branding, packaging and labeling in Nepal. His studied focuses on the existing practice of branding packaging and labeling of new products in the manufacturing units in consumer product. The study procedure through which the data is collected through questionnaire is descriptive, the survey was carried out with different consumer and new products like biscuit, soap, cigarettes, noodles, etc the study farther indicate that the new consumer product labeling and packaging status in industrial units.

In the views of Rita Kuvykaite 2009 package catches buyer's mind to specific product and they influence the consumer purchase behavior about product. In (2009)

 ISBN: 978-81-910118-7-6

Ulrich R. Orth says that packaging design is use for the identification and building of brand image of the product. Ulrich R. Orth (2009) says that packaging design can be used for building the brand identity. Through the detail study of literature packaging design tells that there is no such important strategies for developing a unique packaging design, shape, sizes, images, color etc. in four stages we collect information first review of branding and there impression and relevant information for win, second is to identifies the suitable packaging for win that which is the most important elements and the actual design of sample is selected.

So packaging has an important role in marketing communications, especially from the point of sales and could be treated as one of the most important factors influencing Consumer's purchase decision. Consequently the role of package in marketing communications increases: it must attract consumer's attention and transmit adequate value of product to consumer in the short period right in the place of sale. Therefore there is a necessity to explore package and its elements in more detail, in order to understand which of these elements are the most important for consumer's purchase decision.

There are various factors that influence the buying behavior of consumers such as, Packaging Color, printed information, packaging Material, Design of Wrapper, Background image, innovation.

Packaging Color:

According to the empower-yourself-with-color-psychology, color of packaging is important and apart one company product from other. Packaging color draw attention of the consumers the more the color attractive the more consumer will like it. Different competitor use different color like white, black use for power, blue for trust, red for energy, green for balance, orange, yellow, purple they have different meaning according to the consumer perception.

Packaging Material:

Material of packaging is important element which prevents the product from loss. High quality material attracts customer then low.

Font Style:

Font is important element of packaging which attract the customer attention. Companies who use best font style have successful in the market.

Design of Wrapper:

Ulrich R. Orth(2009) Packaging is used for identification of the product. It plays an important role in attracting the consumer. Children are likely more sensitive in case of wrapper design. So company has to make a wrapper design which attracts the children as well.

Background-image:

In 1999 Goldberg et al. says that image on the product is important so that they increase the attention and increase familiarity with the particular product. Background image is the image in the mind of the customer which help to identify the brand of the product.

Innovation:

Bringing innovation in the packaging design also increase the value of the product like easy open, easy store, recyclable, child proof, breakability etc. in the consumer mind.

Need of Study:

In today's Indian market, packaging is often regarded as the most important form of advertising at the most critical point of entire purchasing journey i.e. the point of purchase. Packaging adds multi-sensory appeal, functionality, added value to consumers purchasing decision due to which there is a need to study the impact of packaging and understand how packaging influences buying decision of a consumer.

Objective:

- To study the Impact of Packaging on the consumer buying decision.
- To identify important element of packaging which directly affect the consumer buying behavior

Research Methodology:

Research design specifies the methods and procedures for collection of requisite information and its measurements and analysis to arrive at certain meaningful conclusion at the end of the proposed study.

We conducted this research with the help of Questionnaire and from the initial stages, to the final designing of questionnaire; we conducted our research through Descriptive research.

Research Design

Universe of the study: The respondent was chosen from different age group and occupation from different areas of Pune.

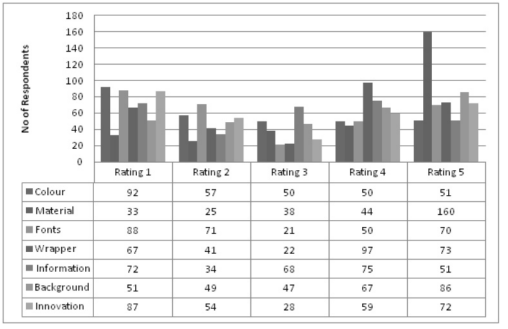
Sample Size: Sample size of 300 Respondents

Sampling Technique: Non-probability convenience sampling

Data Collection: A structured questionnaire with rating scale is used to collect primary data.

Tabulation and Data Analysis

Ratings	Colour	Material	Fonts	Wrapper	Information	Background	Innovation
1	92	33	88	67	72	51	87
2	57	25	71	41	34	49	54
3	50	38	21	22	68	47	28
4	50	44	50	97	75	67	59
5	51	160	70	73	51	86	72



Findings

- Packaging plays a very important role for decision making.

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- Consumer evaluates the product based on its Packaging
- The elements of Packaging (Colour, Material, Font Style, Wrapper Design, Information, Background and Innovation) have impact on Consumer Buying Behaviour.
- Material used for Packaging highly influences Consumer Buying Behaviour
- Second preference according to our research is given to the Innovation of Packaging.

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Study of Consumer Oriented Sales Promotion in FMCG

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Abstract:

Promotion is one of the market mix elements. These elements are personal selling, advertising, sales promotion, direct marketing, and publicity. A promotional mix specifies how much attention to pay to each of the five subcategories, and how much money to budget for each. A promotional plan can have a wide range of objectives, including:sales increases, new product acceptance, creation of brand equity, positioning, competitive retaliations, or creation of a corporate image.

This paper presents synopsis of existing literature in sales promotion and its strategies in the FMCG industry.Explains more on the sales promotional strategies in Personal Care Products of the companies.

Introduction:

FMCG Industry:

FMCG industry alternatively called as CPG (Consumer Packaged Goods) industry primarily deals with production, distribution and marketing of consumer packaged goods. The Fast Moving Consumer Goods are those consumables which are normally consumed by the consumers at a regular interval. Some of the prime activities of FMCG industry are selling, marketing, financing, purchasing etc. The industry also engaged in operations, supply chain, production and general management.

Some of the leaders in FMCG sector having operations in India are:Hindustan Unilever Ltd, ITC (Indian Tobacco Company), Nestle, P&G (Procter and Gamble), Dabur India, Marico Industries, Pepsico, AMUL, Godrej, Parle Agro.

Product line majorly fall into the following segments-

- Household Care
- Personal Care
- Food & Beverages

India's FMCG market is raising the crest of countries economic boom. The FMCG products are used by people on daily basis. Due to a large number of competent companies present within this sector for similar product lines, the FMCG companies face competition. To cope up with their equally combatant competitors, a lot of promotional activities like advertisement, pop, price off etc are introduced from time to time to attract maximum customers to get them buy their products. Using consumer sales promotion to differentiate one's offer has become an order of the day in matured urban markets. More and

 ISBN: 978-81-910118-7-6

more budget is allocated to these activities in order to lure the customer. In such a scenario, it is very essential to study how consumers make their choices in FMCG category where there are several brands in consideration set of customer. The financial risk being low consumers do not mind switching from one brand to another due to sales promotion offer. Hence it would be of interest to a marketer to learn about consumer preferences with respect to sales promotion offers; what schemes do consumers prefer for what kind of brands, which media they prefer to learn about the schemes, whether they prefer incentive immediately or at a later date. These are the questions which consumers consider while choosing a brand. Similarly even a manager has to consider the above while designing a scheme.This project covers the existing literature on consumer oriented preferences with respect to sales promotion.

Literature Review:

Sunil Gupta and Lee G. Cooper (1992) also indicate that the discounting of discounts is higher for store brands than for name brands. Corresponding effects on CIs are also found. For example, in general, offering a discount on a name brand has more impact on consumers' intentions to buy than a similar discount on a store brand. They expected to find similar differences between high- image and low-image stores. However, store effects were not found to be significant.

From the opinion of (Das, 1992; Sinha et al., 1999; Sinha and Smith, 2000), sellers use various advertising and promotion tactics to attract customers and increase sales. Previous research has shown that framing of promotion messages and presentation of price information influence consumers'perceptions of prices and their willingness to buy.

According to Gilbert and Jackaria (2002), packs with "buy-one-get-one-free" may not increase brand awareness before trial purchase because the customer will only come across the product once in the store (unlike samples or coupons), however, if the promotion is noticeable it will facilitate brand recognition and brand recall for future purchases. Since an additional amount is given for free, consumers may be persuaded to buy the product if they feel it represents a fair deal that provides value for money. Ong et al. (1997) found that consumers appeared to be slightly sceptical of the bonus pack offer, but somewhat more trusting of the price and quantity claimed.

Acquisiti and Varian (2005) stated that The notion that targeted deals are more efficient that cross the board sales promotion that provide unnecessary discounts to price-insensitive consumers has prompted a dramatic growth in customized pricing and sales promotion.

Nelson OlyNdubisi and Chew Tung Moi (2006) concluded that Malaysian consumers respond more to free sample, price discount, in-store display, and bonus pack than coupon. A plausible explanation for the weak influence of coupon was poor knowledge of the tool. This research showed the linkages among various promotional tools and product trial, and thereby helped to better understand how Malaysian

consumers respond to various promotional tools offered by marketers. Promotions that emphasize in-store display, free sample, price discount, and bonus pack are likely to be more effective than coupon.

However, *Lan Xia and Kent B. Monroe (2008)* have distinguished between consumers who have prior goals to buy the product relative to those who do not have such purchase goals. Further, they have added whether consumers 'responses to different promotion message framing and price presentations differ when they do or do not have pre-purchase goals. Since the same promotion information may lead to different perceptions as consumers 'goals vary (Shavitt et al., 1994), understanding how consumers with different purchase goals react to various promotion messages can help sellers design effective promotion programs.

Gopal Das (2011) in his study "effect of retail sales promotion on buying behaviour of customers: an empirical study" said that price promotions are increasing consumers buying behaviours. This paper highlighted sales promotion such as direct price discount, buy one get one free, buy one get another product free, media advertisement, store publicities are stimulate consumers buying decision in FMCG products.

Abhigyan Bhattacharjee (2011) described FMCG products influenced to Medias are both visual and print medias. Advertisement and Medias as well as publicities are creating new demand of products. It is suitable for both rural and urban areas.

Garima Malik (2011) in his study indicates that strong distribution and affordability also road shows are use of customer retention and stimulate to buy Dabur products in rural market.

Robert P.Hamlin and Andreainshch (2011) in their article "Retailer branding of consumers sales promotion" this article indicate that food industry customers are like price promotions. The price cut immediate hit the sales as well as create demand in food products. The researcher said that manufactures and retailers are may have power relationships. This paper maximum highlighted promotions are coupons, price discount and 20 percentage price offers

ParagiKuntal Shah and Bijalnishantmethta (2012) in their article "effect of sales promotion and their availability on consumers buying behaviour: a perspective on personal care products" opined that today's personal care customers are greatly influence of advertisement. The sales promotions immediately hit the sales volume and face the competitions. The sales promotion stimulate to consumers buying behaviour in such as sales promotions advertisement, buy one get one free and store communications.

Sales Promotion:

Sales promotion has a purpose, primarily to stimulate market demand, improve product availability and to coordinate public selling, advertising and public relations. So in orderto induce the consumers to make a quick buying decision and create increase in sales. Typical example of winning a prize or offering some extra

 ISBN: 978-81-910118-7-6

products with the same price. It is advertising which makes a platform for sales promotion where customers can see the direct added value of buying your product. On the other hand, advertising is an intangible promotion of products to send the marketing message to the customer base.

Consumer Oriented sales Promotion:

We define sales promotion as any of a variety of techniques designed to offer purchasers an extra inducement to buy in the form of value or benefits beyond those offered by the product being purchased. This part of sales promotion is referred to as "consumer-oriented sales promotion." However, extra inducements to buy may be offered at any point of exchange anywhere in a channel of distribution. In retail channels consumer-oriented sales promotions often become tools for short-term fixes to sales. Circumstances frequently call for boosts to sales, and consumer-oriented sales promotions can be ideal for that purpose. When overused, however, they can actually hinder a brand's ability to build equity among target markets. Excessive use of some consumer-oriented sales promotion techniques can, for example, erode consumer confidence in brand quality. If the brand must constantly be promoted, consumers may reason that brand quality may be poor. Or consumers may delay purchasing a brand if they believe that a reduced price or other purchase incentive will soon be forthcoming – a reasonable assumption of a brand is over promoted. Retailer sales promotion devices are regularly rolled out for new marketing initiatives. For example "buy one, get one free, three for two, buy quantity and receive a lower price or percentage discounts on specific days of the week.The "ultimate goal" of all promotional activities finally lies into building sales in some way, which cannot happen without transactions. There are so many tools or technique available to the marketers for achieving objective of sales promotion. These tools should be used considering all other factors affecting such as cost, time, competitors, availability of goods etc. These tools are as under-

1. Coupons
2. Price-Off
3. Freebies
4. Scratch Cards
5. Premium
6. Sampling
7. Extra Quantity

Consumers attract the greatest number of sales promotion devices. Most commonly used techniques include price deals that offer a temporary price reduction for a specific period while cents-off deals offer a brand at a lower price, usual as a percentage (%) marked on the package.Social Media like Facebook, twitter are playing major role in promoting the product offers of contests, coupons, premiums, prizes which are also customized in order to reach only to the target customer.

Need of Study:

Today Indian market has many FMCG companies and products. FMCG companies have introduced many sales promotions to consumers. The companies and consumers

can't identify for which promotions is suitable for them. Sales promotions are generally looked at as tools that undermine the brand; yet a tool that is necessarily meant to speed up sales. Consumer sales promotion take up a large share of the total marketing expenditure despite which it remains an area that still attracts attention as an essential component of the promotion mix meant to increase short term sales. It is therefore not surprising that most of the marketers resort to sales promotions to attract the competitor's market share. This study has attempted to explore which sales promotional tools dominate in different product line categories of the FMCG market.

Objectives:

1. To study concept of sales promotion,methods of promotion in markets.
2. To study the various customers oriented sales promotion tools and retail promotions.
3. To evaluate the consumer oriented sales promotions.

Research Methodology:

Research methodology process includes a number of activities to be performed. These are arranged in proper sequence of timing for conducting research. One activity after another is performed to complete the research work.

Type of Research:

The topic for the research study is sales promotion strategy and the nature of the topic is theoretical and descriptive. So to conduct the research study the type of research suitable is descriptive research only. The data is collected from online sources of journals, reputed magazines, newspaper articles and company website of the companies performing in FMCG sector.

Scope of Study:

This study is relating to promotion-mix elements out of total marketing efforts. It will cover mainly sales promotion, methods for sales promotion, combination of promotion methods with sales promotion, sales promotion strategy and its related concepts. This topic has studied in FMCG sector in world and Indian industry. Top 5 leading companies have been selected on the basis of their market share for the research study and their comparative study to be carried out. The project is based on and interpreted from secondary data via online research and information obtained from leading FMCG companies' website, published sources such as journals, reputed published magazinesand books.

Data Analysis:

Sales promotional offers within companies various segments are mentioned below:

Hindustan Unilever Limited:

Extra Packs (Price Packs), Special Discount, Premiums

AXE: Sales Promotion by iPhone

LIFEBUOY: Silver Coins in selected soap packs

LUX: Gold Coins, 3+1 packs

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LAKME: Extra Packs, Sachets, Combo Offers

Vaseline: Small packs tied with big shampoo packs.

Pepsodent: Toothbrush and toothpaste combo packs.

P&G:

Prize Schemes(Giving free cups with the pack), Lucky Draw Coupons (Attractive Prizes), Trade fair and exhibition, Providing catalogues, sales contest, Contest Prizes.

It also has online coupon redemption facility on purchase of selected products.

Godrej:

Personal Care:Cinthol: Buy 4+1 packs

Fairglow: Extra packs

Shikakai: Buy 1 get 1

Godrej Shaving Cream: Get razor free

Kesh Kala: Buy 1 get 1

Godrej Aer Spray: Extra Packs

Dabur:

Dabur hair Oil: Comb Free with hair Oil

Gulabari: Extra Pack; Crème+Rose water combo

Vatika Shampoo: Conditioner free (Combo Pack)

Uveda: Facewash+Scrub combo Pack

Fem: Extra packs

Red Toothpaste: Extra Pack and Toothbrush &Toothpaste Combo

LalDantManjan: Toothpaste sample free.

Emami:

Naturals: Buy 2 get 1 free, Extra Packs.

BoroPlus Ice: Combo Offers

Navratna: Extra Pack Offer for limited time.

Fair & Handsome: Free Sample of navratna oil.

Emami Talc: Buy 1 get 1 free

Hairlife: Price Off

PureSkin Soap: Free sachets of Boro Plus cream

Gold-Tumeric Golden Soap: Gold Coin

Cold-Cream: Soap Free

Mentho Plus Balm: Price Off

Emami Soap: Soap Case free

Findings:

If we consider the top 5 companies in FMCG sector, the maximum offers are given by HUL, P&G, Godrej and Emami on their products. If we look at the trend in the products of above mentioned companies, extra pack offers are most popular especially in personal care.In addition to that P&G offers E-promotions on their website which includes free coupons or price off coupons brought after purchase of selected products.Some other findings have been listed below-

Advertisement and sales promotions methods attract more customers and personal selling is the least method that attracts customers.

Extra Pack, Price off, combo packs are the maximum methods used for promotion.

Extra Packs and Price off or discount method is the most effective method, combo packs is second and coupons/ scratch cards is third respectively to motivate customers to buy products.

The company which launches maximum sales promotions benefits are ranked as HUL first, P&G second,Emami and then the others

Most of the times for offers are brought in scheme such as off season, during falls in sales volume and during peak season. During festive seasons, gold/silver coin offer within the product, especially soaps is very popular.

Major objective of sales promotions schemes are to increase sales, push up sales in off season,increase sales of products out of demand and neutralize completion effect.

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Web site www.wikepedia.com

ISBN: 978-81-910118-7-6

Analytical Study of Relationship between Customer Satisfaction and Sale & Profits of the Multinational Corporations in India With Special Reference to Select Automobile Manufacturing Companies

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Introduction:

Multinational Corporations (MNCs) play a critical role in the global economy. By most estimates, production by multinational enterprises now accounts for over one-fourth of the world's output and one-third of world trade. Moreover, many scholars believe that the investments of multinationals, commonly known as Foreign Direct Investment (FDI), have beneficial effects on economic growth, transferring technology and managerial expertise as well as providing capital. The increasing size and complexity of multinational corporations has forced constantly to seek new ways of maintaining an adequately efficient scheme organization. Corporate growth has produced a web of powerful and often a strong opposition within each enterprise. The methods of organization and control interact these pressures without unduly diminishing the local initiative of managing forces to count foreign subsidiaries have been closely related to the strategies of expansion and have valued according to the national origin of the parent company. The closest historical analogy of the modern multinational is the colonial state monopoly enterprise of the seventeen to nineteen centuries. These were distinct organizational structure and head quarters in the metropolitan state to which the surpluses were dispatched. These corporations were semi governmental operations and were agents of state imperialism. The most famous and typical was the British's East India Company which operated under different names for nearly 300 years. Since the actual range is so large multinationals in India more than 1200 multinational companies in India, according to the State Statistics Center there MCCIA with different products. And practically all there is to check the results of this study only focused on the automotive multinationals is Hindi. Between them the two companies chosen as Mercedes and Maruti Suzuki, relationship between customer satisfaction with both sales and profit compared.

Customer Satisfaction:

Customer satisfaction of the product purchased in all trade categories that are of interest to manufacturers or vendors. Customer satisfaction in terms of customer retention and stability of the manufacturers

 ISBN: 978-81-910118-7-6

will compete in the markets. But the issue of whether these factors are related to the financial management of the company's profit, such as sales or not? This means that the higher the level of customer satisfaction than most of the product will be more sales and profit. Some believe that there is a direct relationship between customer satisfaction and sales or profit or income means more sales will be much more satisfactory but some believe that other tools in this regard are more like advertising effectiveness and performance of the managers in this research it has been proved and rejected.

Objectives of study:

At the same time, the difficulty of reconciling national and corporate objectives may be partly due to deficiencies in the national plan. In many cases plans fail to provide adequate guidance for the activities of the private sector, whether domestic or multinational corporations. When plan objectives are clearly stated and concrete measures are put into effect, multinational corporations may in fact be responsive to them. Therefore the objectives of this study are as follow:

1) Study the relationship between the level of customer satisfaction with the company's net profit
2) Study relationship between the level of customer satisfaction with the company's sales.

Hypothesis of study

Hypothesis of the study which has a tentative supposition a possible solution based on judgment or some logical wideness. The researcher has conducted some tests with the set of hypothesis. When we come to scope of study it is considered as the engine of economic growth and can improve national and international economy. For this study the researcher has set the following hypotheses for testing.

1) Customer satisfaction is directly related to the company's net profit.
2) Customer satisfaction is directly related to the company's sales.

Comparative Study:

In this regard, financial and administrative data from the Census MCCIA that a state is under granted of government Sales and profit of both Mercedes and Suzuki Maruti companies has been studied over the years 2007 to 2011.

Net profit of companies- 2007-2011

sum and Average of net profit companies

Company	Sum of total P.A.T in [crores]	Average of P.A.T in [crores]
Maruti Suzuki India	**9297.70**	**1859.54**
Mercedes. Benz. India	**423.90**	**84.78**

Total sales of companies- 2007-2011

Sum and Average of sale companies

Company	Sum of total sales in [crores]	Average of total sales in [crores]
Maruti Suzuki India	134932.90	26986.58
Mercedes. Benz. India	3799.70	759.94

Research Methodology:

It is very important weapon for a researcher which hence it provides a structure for decision making by implicating, question and writing for the responses, collection analysis and interpretation of information. Here in this study Descriptive and Exploratory Research method is followed, where researchers are looking for conclusions. To process further in this research the researcher has token the data for his study from two sources. At first researcher collected by questioner from the Company's costumers to examine their level of satisfaction and other Financial and administrative support from the central government under the Name MCCIA.

Hypothesis testing:

We determine the correlation coefficient to determine the strength and the direction of a linear relationship between Total Customer Satisfaction and profit after tax of companies. The null and alternative hypotheses are as follow:

H0: Total Customer Satisfaction aren't correlated with profit after tax of companies

H1: Total Customer Satisfaction are correlated with profit after tax of companies

In the next table correlation of between Total Customer Satisfaction and profit after tax of companies computed.

Correlation between Total Customer Satisfaction and profit after tax

		Total Customer Satisfaction
profit after tax of companies	Corre-lation	.071
	Sig	.846
	N	10

With the base on this table we can find With respect to sig and comparing with 0.05 it is clear that the null hypothesis accepted and with confidence 95 percent Total Customer Satisfaction and profit after tax of companies are not correlated. And also with the above mention the null and alternative hypothesis about the relationship between Customer Satisfaction and sales of companies is as follow:

H0: Customer Satisfaction isn't correlated with Total sales of companies.

H1: Customer Satisfaction is correlated with Total sales of companies.

In the next table correlation of between Customer Satisfaction and Total sales of companies computed.

Correlation between Total Customer Satisfaction and Total sales

		Total Customer Satisfaction
Total sales	Correlation	.081
	Sig	.824
	N	10

 ISBN: 978-81-910118-7-6

With the base on this table we can find With respect to sig=0.824 and comparing with 0.05 it is clear that the null hypothesis accepted and with confidence 95 percent Customer Satisfaction and Total sales of companies is not correlated.

Analysis of data:

Statistical Package for the Social Sciences (SPSS) version 20 was used in the present study for the purpose of analysis and presentation of results.

Conclusion & suggestions:

Based on the studies conducted in this research concludes effect on customer satisfaction has not increased sales or profits. The survey was conducted from 85 customers for more than 75% of the companies were satisfied with the Auto-Benz. And about 30% of consent has the Marut Suzuki Mercedes-Benz sales and profits were much lower than Marut. This will result in increased profits and other tools such as advertising sales and cost effective product and effective performance management. The proposal in this regard would be that people are more inclined to buy cheap product promotions. On the other hand, are more influenced by advertising, so Benz company can to adjust their prices to take advantage from other management tools are also Can be effectively used to increase their sales and profits.

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See also tables 11 and 12 in Annex III and figures 1 and 2 in the text. 70 a discussion of the distribution of affiliates is this section refers to affiliate links as defined in the tables, except in the case of the United States. Peg 18

The nine largest United States multinational corporations in petroleum Iliad crude oil operations in 1938 in 40 countries and in 1967 in 96 countries. Over the same period their subsidiaries in all types of operations related to Petroleum increased from 351 to 1, 442. Vernon, op. cit., p. 32. -10- Peg. 21

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The Implementation of Customer Relationship Management at House-Building Companies

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Abstract:

Customer Relationship Management (CRM) is one of the most popular business strategies that have been adopted among researchers, house-building companies, institutions and organizations nowadays. CRM is responsible for organizational success in different sectors as it increases service efficiency and helps house-building companies to sustain a good relationship with customers through increasing their satisfaction, retention and loyalty.

Some important changes in the business environment in several countries are forcing house-building companies to change their competitive strategies. This paper discusses a set of customer servicing practices, which have been adopted by small-sized house-building companies that have been involved in quality management improvement programs, emphasizing customer satisfaction (CS) measurement. An enterprise's productivity is closely correlated with its people and strategies; therefore, a forceful human resource management system is the most valuable asset of the current century construction companies.

House-building companies have increasingly recognized the importance of managing customer relationships, and many organizations are turning to CRM to better serve customers and facilitate closer relationships with them.

Key Words: *Customer Relationship Management, house-building companies, customer satisfaction, customer servicing practices.*

ISBN: 978-81-910118-7-6

Financial Contribution of NABARD With Special Reference to Maharashtra

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Abstract:

SHG is playing a vital role in the development of Rural Economy as it caters each & every financial need of Rural Financial system. But alone SHG can't do the Business of keeping good financial mechanism, hence in order to strengthen SHG Movement NABARD has come up with its varied schemes. Thus a detailed evaluation of how NABARD has developed Rural Credit Financing Mechanism through SHG's is studied in detail in this paper which will clearly find out the contribution of NABARD in the improvement of Rural Economy.

Key Words: *NABARD, SHG, Return, Risk etc.*

Introduction:

India is always been known in the world for its Rural Based Economy as nearly 65%of its population is dependent on Agriculture & other rural businesses. Although such a huge dependence is seen till only 12.5% of Indian GDP comes through it.

The major reason of such a poor performance of rural economy in National Income generation is that, many of the rural peoples are facing a problem of availability of Finance through formal means like Banks & Other Financial Institutions at cheaper rates & in abundance. Till recently Private money lenders have played a vital role in Rural Finance outcome of which is Increased Suicide Cases in Rural India.

One major player of Indian Financial System who has tried its level best to improve the situation is NABARD. NABARD has started its operations to improve the Indian Rural Economy by providing various Financial & other Assistances like Education, Infrastructural Development, Entrepreneurial development etc. Various schemes of NABARD have really shown its utility in the rural economic development. Hence the entire focus of this Research paper is to study & understand various schemes of NABARD & its impact on Rural Economic development.

Objectives of the Study:

1. To study & analyze various schemes of NABARD.
2. To study & find out financial assistance given by NABARD to various Rural Credit Societies.
3. To study & find out the contribution of NABARD in the SHG development.

Scope of the Study:

1. This paper covers various functions &

 ISBN: 978-81-910118-7-6

roles performed by NABARD for rural economic development.

2. This paper also helps in finding out the role of NABARD in the development of Rural Credit Expansion program.
3. This paper covers the role played by NABARD in the development of SHG movement of Rural India.
4. The study area of this Research paper covers Rural Economy of Maharashtra & various schemes of NABARD in it.
5. This paper also helps in finding out the present status of various NABARD Schemes.

Limitations of the Study:

1. The study focuses only on various schemes of NABARD for Rural economic development however Rural development has boosted by so many other various Organizations which are not studied here.
2. The study area of this Research paper focuses only on Rural Maharashtra hence a through conclusion cannot be drawn from it.
3. This research paper covers a data of last two to three years which in turn again limits this research endeavor for drawing certain conclusions form it.

Research Design:

According to "Holt Rinehart" –

"Research Design is a catalogue of the various phases and facts related to the formulation of a research effort. It is the arrangement of conditions for collection & analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure."

For the present study Researcher has formed Exploratory Research Design in which he is going to study analytically the contribution of NABARD in the rural economic development.

Sampling:

A sample design is a definite plan for obtaining a sample from a given population. It is the tactic or plan of a researcher in order to arrive at a sample size which will fairly represent the entire population under consideration.

There are basically two types of sampling viz.

- Probability sampling and
- Non probability sampling.

For the present study researcher has followed Quota Sampling in which he is going to study the Maharashtra region for Credit development through NABARD Schemes.

Data Collection:

a) Primary Sources of Data Collection:

Primary data being the latest source of information has collected through-

a) Interviewing various managers & representatives of Rural & other Banks
b) Interviewing various SHG representatives.

b) Secondary Sources of Data Collection:

Secondary data required for analysis

has collected from various sources like-

- Fact sheet been published by NABARD.
- Statistical report published by NABARD.
- Journals related to the topic.
- Magazines
- Periodicals
- Various internet websites related to the topic.

NABARD:

NABARD is set up as an apex Development Bank with a mandate for facilitating credit flow for promotion and development of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts. It also has the mandate to support all other allied economic activities in rural areas, promote integrated and sustainable rural development and secure prosperity of rural areas.

Objectives of NABARD:

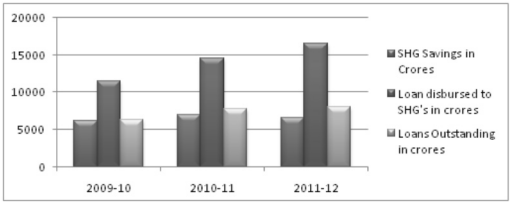
1. To Providing refinance to lending institutions in rural areas
2. To Bring about or promoting institutional development and
3. To Evaluate, monitorand inspect the client banks
4. To act as a coordinator in the operations of rural credit institutions.
5. To extend assistance to the government, RBIand other organizations in matters relating to rural development.
6. To provide training and research facilities for banks, cooperatives and organizations working in the field of rural development.
7. To help the state governments in reaching their targets of providing assistance to eligible institutions in agriculture and rural development.
8. To act as a regulator for cooperative banks and RRBs

Data Analysis & Interpretation:

a) Contribution of NABARD to SHG's:

Rs. in crore

Particular	2009-10	2010-11	2011-12
SHG Savings	Rs.6198.71	Rs.7016.30	Rs.6551.41
Loan Disbursed to SHG's	Rs.14453.3	Rs.14547.73	Rs.16534.77
Loans Outstanding	Rs.6251.08	Rs.7829.39	Rs.8054.83



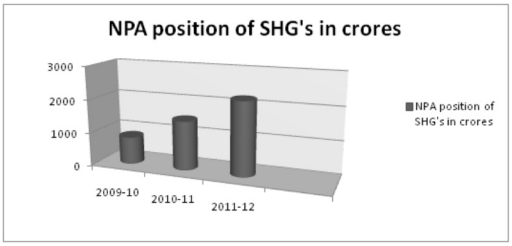
- SHG Savings have slightly declined in the year 2011-12 (Rs. 7016 Cr to Rs. 6551Cr)
- SHG's have shown higher loans because of increased Funding (Rs.16534 Cr)

b) NPA Position of SHG's:

Rs. in crore

Particular	2009-10	2010-11	2011-12
NPA	Rs.823.04	Rs.1474.11	Rs.2212.73

 ISBN: 978-81-910118-7-6

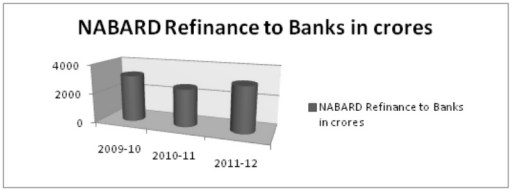


- NPA has drastically increased in the year 2010-11(Rs. 1474 Cr from Rs. 823 Cr)

c) NABARD Refinance to Banks:

Rs. in crore

Particular	2009-10	2010-11	2011-12
NABARD Refinance	Rs.3173.56	Rs.2545.36	Rs.3072.59

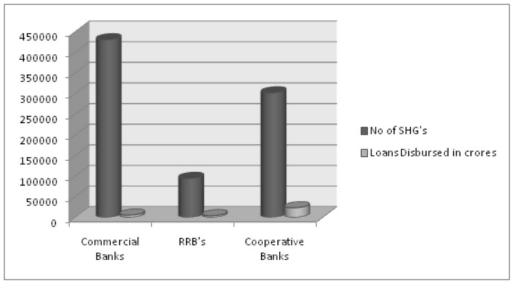


- NABARD has given highest finance in the year 2009-10 (Rs. 3173 Cr.)
- NABARD financing shown negative growth in 2010-11 (Rs.2545 Cr. From 3173 Cr)

d) Loan Disbursement in Maharashtra:

Rs. in crore

Par-ticular	Commercial Banks		RRB's		Cooperative Banks	
Maharashtra	No of SHG's	Loans Dis-bursed	No of SHG's	Loans Dis-bursed	No of SHG's	Loans Dis-bursed
	430614	Rs. 5357.03	94519	Rs. 3882.05	301914	Rs. 23122.65

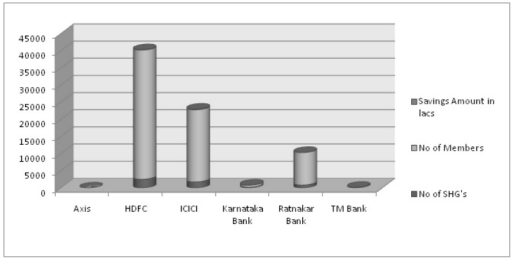


- Highest SHG's are linked to Commercial Banks & Cooperative Banks only.
- Loan disbursed to SHG's through Cooperative banks is highest in all (Rs.23122 Cr.)

e) Bank wise Details of MAHARASHTRA as Regards Savings:

Rs. in Lacs

S/r No.	Bank	No of SHG's	No of Members	Savings Amount
01	Axis	2	21	Rs. 0
02	HDFC	2514	37710	Rs. 99.27
03	ICICI	1755	21060	Rs.186.67
04	Karnataka Bank	208	624	Rs.19.61
05	Ratnakar Bank	839	9506	Rs.34.34
06	TM Bank	11	200	Rs. 0.55



- Most of the SHG's have invested in HDFC & ICICI (Rs.186 Lacs& Rs.99 Lacs)
- Highest membership of SHG's is with HDFC (37710 Members)

Findings:

- SHG savings have shown a decrease of nearly 6.62% in the year 2011-12 indicating higher Loan disbursement by them.
- A gradual increase in Loan disbursement shows better funding to SHG's over the years (Rs. 14547 Crs. to Rs.16534 Crs)
- NPA position has shown a drastic increase in the year 2010-11 (Rs. 1474Crs from Rs. 823 Crs.)
- NABARD has shown negative growth rate in Refinancing in the year 2010-2011 (Rs. 2545 Crs. from Rs. 3173 Crs.)
- Highest loan disbursed to SHG's is by Cooperative Banks (Rs. 23122 Cr as against Rs. 3882 Crs.)
- Most of the SHG's are linked to Commercial &Cooperative banks.
- Maximum SHG's are attached to ICICI & HDFC for their savings. (Rs. 186 Lacs&Rs 99 respectively)

Conclusion:

From the entire research endeavorabout NABARD & SHG's Researcher can conclude that NABARD has really catered the varied needs of various Economic players like Banks, SHG's and Co-operative credit societies which in turn has boostedthe Economy.

Suggestions:

- NABARD should look after other Economic players so that Economy can get boosted.
- SHG's should increase the amount of Savings which in turn will give stability to the Economy.
- NABARD should maintain the level of funding to Banks as it helps in the development of SHG's.
- NABARD should bring its provisions in line with the New Central Co-operative act, 1998.

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ISBN: 978-81-910118-7-6

A Study on Financial Performance of Oil and Natural Gas Companies in India

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Abstract:

Oil and gas industry refers to companies that are primarily engaged in oil and gas exploration and production (Upstream), oil sands and heavy crude oil / bitumen upgrading for certain operations, independent refineries / marketers of petroleum products (Downstream) and integrated companies that are engaged in all phases of the business, and related industries such as transportation, petrochemical and / or renewable fuels operations. The present study is an attempt to understand the role of oil and gas sector in the development of Indian economy. This study highlights the financial performance oil and gas companies to year 2011-2012.

Key Words: *Oil and Gas Industry, Upstream, Downstream.*

Introduction:

Oil and gas industry refers to companies that are primarily engaged in oil and gas exploration and production, (generally known as upstream operations), including oil sands and heavy crude oil / bitumen upgrading for certain operations, independent refineries / marketers of petroleum products (downstream operations), and integrated companies that are engaged in all phases of the business (i.e. upstream and downstream activities), and related industries such as transportation, petrochemical and / or renewable fuels operations.

The upstream sector of the oil and gas industry is characterized by substantial volatility in the ultimate prices realized, the significant cost involved in finding, developing and producing reserves, and the often uncertain estimates of recoverable resources.

The refining operation of the downstream segment is expected to highly volatile refining margins, with marketing activities providing a certain degree of stability. For integrated operations, downstream usually provides diversification and support to upstream, and the opportunity to capture the fuel value chain.1

Research Design:

The research design for the study too consisted of a review of the past and current literature on the oil and natural gas sector of India. Since the present study is concerned with the oil and natural gas sector of India, researcher has made an effort to find out how the key players have performed in the last decade. In this study, therefore, researcher has included a theoretical perspective of oil

 ISBN: 978-81-910118-7-6

and natural gas sector of India. To study the performance of this sector during the last decade has been a very important part of the study research.

Objectives of the study:

i) To understand the role of oil and natural gas sector in the development of the Indian economy.
ii) To study the financial performance of selected oil and natural gas companies.
iii) To draw conclusion and make some suggestions.

Hypothesis of the study:

There is no significant difference in the performance of selected Oil and Gas companies.

Scope of the study:

The present study covers the oil and natural gas sector of India which was in operation during the last 6 years i.e. from 2005 to 2011. It is sufficient to have an idea about the past financial performance of the selected companies. This study covers these companies from three important segments of oil and natural gas sector i.e. upstream, midstream and downstream segments of this sector.

The present study is intended to focus on financial performance of the selected oil and natural gas companies of India. The performance of a company is studied with reference to the different financial tools which have been used to analyse the financial performance of selected companies.

These companies are

i) Oil and Natural Gas Corporation (ONGC)
ii) Oil India Limited (OIL)
iii) Bharat Petroleum Corporation Limited (BPCL)
iv) Hindustan Petroleum Corporation Limited (HPCL)
v) Gujarat State Petroleum Corporation (GSPL)
vi) Gas Authority of India Limited (GAIL)
vii) Indian Oil Corporation (IOC)
viii) Reliance Industries Limited (RIL)
ix) Aban Offshore
x) Hindustan Oil Exploration Company
xi) Jindal Drilling Industries

Delimitations of the study:

The main focus of this study is on the oil and natural gas sector of India. The natural gas will not be distinguished as a separate industry throughout the qualitative research, and most of the analysis on oil has considered to hold for gas too. Thus, oil and gas has considered as the same industry. This is due to the fact that gas is mostly found together with oil and oil companies in focus are at the same time producers of gas. However, natural gas has received separate focus when trying to estimate its supply and demand.

Oil and gas sector has consider large, vertically integrated (i.e. from upstream to downstream) national and international oil companies (NOCs and IOCs). Researcher has mainly focused on the upstream to

downstream operations of oil and natural gas sector of India.

Source of Data:

The present study is based on secondary data sources, procured and extracted from the financial statements of the selected companies and data base of Center for Monitoring Indian Economy (CIME) namely BROWESS. The published annual reports of the selected companies are taken from related websites, magazines and journals on Economic and Finance have also been used as source of data.

Methodology:

In the present study, it is proposed to study the financial performance of selected oil and natural gas companies of India, using case study approach which enables to study the financial performance of the selected companies at micro level, and to study the strategies adopted by these companies. The study approach is proposed for detailed study of financial performance and strategies with hypothesis proposed to be tested and confirmed or rejected to be tested as to whether the companies sustained growth with the formulation and implementation of the growth of companies.

Review of Literature:

1) Hartley P. and Medlock P. R. (2002), have been studied the performance of the national oil and natural gas companies to judge their performance. The analysis is confounded by the lack of systematic and reliable information. According to authors, companies seldom report their true findings for commercial reasons and governments – which own the reserves – often find it useful to be elastic with data. Authors have given an example in this context. They stated that, in 1984, the Kuwaiti government increased its reserve estimate due to the implementation of an OPEC production quota system that set country production levels based on country reserves.

This study paper is part of a larger study that aims to unravel those various mission and to understand how the management of national oil and gas companies affects their performance.

2) A research paper by Obaidan V. and Scully D. (2009) has also examined the performance of oil and natural gas sector. This study paper is an early assessment and discussion of systematic data on oil and natural gas sector. Authors have analysed available macro data on oil and gas companies and used the 1999-2006 editions of Energy Intelligences Top 100 with data published through 2004. This study paper presents the data and analysis along with some initial interpretation. Their ultimate goal is to use data for an analysis that allows them to identify different 'type' of oil and gas companies based on their characteristics that explain performance.

3) Paul Stevens, (2010), has provided input for the methodology of the study on oil and natural gas companies and value creation, launched in march 2008 by the Gas and Mining Policy Division of World Bank. The manuscript of this paper has not been prepared in accordance with the procedures appropriate to formally

 ISBN: 978-81-910118-7-6

edited texts. Some sources cited in this study paper may be informal documents that are not readily available. Author has stated that, oil and natural gas companies matter because they dominate the proven oil reserves that are expected to supply the world's growing need for liquid fuels. Also, in many countries, the oil sector dominates the economy and is seen as the major source of economic development. This study seeks to help define a methodology for assessing oil and natural gas companies effectiveness, performance and ability to create value.

4) A book by Y. Chandrashekhar, titled, "Indian Oil Industry", published in 2007. This book highlights three areas that are of concern to the sector today, namely, structure, growth and profitability and performance. The author has opined that the oil and gas sector is facing a major transition that is likely to require many of its key plays to adopt significantly to a changing environment over the coming decade. Author has further stated that, over the next decade, this transition is likely to continue to take shape, giving rise to new opportunities and challenges for oil and natural gas sector of India. These challenges may affect the performance of oil and natural gas companies. Author has stated that, new players are likely to emerge and strategic relationship will be likely to adopt to suit their evolving needs.

5) Irakli Menabde, (2008) in her study paper examines a number of empirically utilized and academically established valuation methodologies in order to value Integrated Oil and gas Company's common stock. By applying and comparing DCF, SOP and Real Options based valuation methodologies with the aims of establishing both, an absolute share price value and relative value for the sample representatives of for Exon Mobil Corporation and BP Plc, the author has highlights key input parameters for each methodology and discusses the key differences in the outputs of the models. The study finds that the market relies on the Discounted Cash Flow Valuation methodology and that the Real Option based valuation attributes significantly higher value to the companies, while the sum of parts valuation demonstrates significant discounting of the value in upstream assets and a rather large holding discount as measured by stand alone market peers.

The Author then goes further by providing a historical 20 years back test of the global Integrated Oil and Gas tock portfolio based on publicly available company financial factors, and provides a stock selection model for the custom universe in the long-short market neutral setting.

6) R. L. Mansell, J. Winter, M. Krzepkowski, M. C. Moor (2002) of The School of Public Policy, University of Colgary, Canada, have studied the size role and the performance of oil and natural gas sector of Canada. According to authors, the oil and gas sector is a key driver of the Canadian and Albertan economics. Directly and indirectly it typically account for roughly half of Alberta's GDP, as well as one third of the country's business investment and a quarter of business profits and rising global demand will only add to these figures. Authors have

further stated that, energy sector is also a changeable place populated by companies of all shapes and sizes, from small emerging juniors to well established major whose daily production capacities are hundreds or thousands of times greater.

This study paper goes a considerable way towards filling that gap, bringing together comprehensive data sets on 340 public oil and gas firms to chart essential patterns and trends, so policy makers and industry watchers can better understand the complexity, performance and functioning of this important sector.

7) Roger Gastrell, (2009), has stated that, the nationalization of oil refineries by local governments remains a major issue. Author says, National Oil Companies control over 70 percent of the world's oil reserves. While discussing performance and growing importance of national oil companies, author has stated that, in the latest energy intelligence top 100 ranking of the world's oil companies, nearly half of the positions are occupied by national oil companies. Author has also highlighted the geopolitical issues being faced by national companies which are directly affected the overall performance of oil and gas companies. In addition, national oil companies have been affected along with the rest of the industry from the economic crisis. Although they can sometimes seek new government funding to increase their financial pressure themselves. Author has further stated that, it is important to note that a large number of refining projects had backing of either the local government or large national oil companies.

8) A. Vinod Kumar, (2008) state that, the global refining industry is facing with a number of financial, operational and market challenges understanding to day's key issues can help refineries better prepare for growth opportunities and better performance in future. While discussing this issue author has stated that, traditionally, the global refining industry has been driven by a steady rise in the consumption of transportation fuels. A worldwide increase in disposable income has produced more vehicles on the road, especially in developing economies such as the BRIC countries (Brazil, Russia, India, China). Demand has also been driven by the need for more efficient fuels as well as cleaner fuels to comply with strict environment standards.

9) Bard, Misund, Petter Osmundsen and Frank Asche (2004), have examined the equity valuation process for the world's largest privately owned oil and gas companies. Their analysis provide evidence for a structural shift in the valuation of the largest oil and gas companies. Furthermore they examined the key value – drivers that have been instrumental in the structural shift. Using financial and operational information from 15 international oil and gas companies over the period 1990-2003 and proxies for merger activity and market sentiment, they test for companies. Authors have shown that financial information such as net income, cash flows and accruals, and operational measures such as the size of oil and gas reserves, are instrumental in explaining the structural shift in valuation of oil and gas companies.

 ISBN: 978-81-910118-7-6

10) Raj Kumar M. (2011), investigates the relationship between earnings management and different factors within the business units of the exploration and production division of an oil and gas producing company, such as earning level, entity size, production level and stage of the entity. It is hypothesized that there is a negative relationship between the level of earnings management and earnings size, production level and stage of the entity. The research sample consists of 22 stand alone business units within the exploration and production division of an oil and gas producing company from 2005 till 2010. The data are collected from the 132 annual financial statements of the entities. The results of this study show that, even though there has been found evidence for earnings management within the business units of the exploration and production division, it is hard to say if this is caused by managing th earnings or a fact of nature.

Du Pont Analysis:

The Du Pont model was developed as a tool for analyzing methods of increasing return on assets (ROA). At the heart of the analysis are two financial measures: operating profit margin (NPM) and total asset turnover ratio (TAT). The OPM measures a business' pre-tax returns relative to its level of sales, while the ATR measures the efficiency of the business' asset base. Multiplying OPM times ATR equals the business' ROA. Over time the Du Pont model has been expanded to include the leverage of an operation and thereby allowing for computation and analysis of return on equity (ROE).

Du Pont Model is only a brief overview of the financial analysis, it allows the analyst to "work backwards" to identify areas of a company that may need some management attention. The Du Pont analysis was done by calculating ROS, ROA and ROE for the selected oil and gas companies.

Table 4.8.12: Companies ranking based on Net Profit Margin

Company Ranking	NPM	TAT	Equity Multiplier (EM)	ROA (NPM* TAT)	ROE = EM* ROA
Hindustan Oil Exploration Company	0.33	0.2	1.19	0.07	0.08
ONGC	0.28	0.74	1.19	0.21	0.25
GSPL	0.19	0.22	1.96	0.04	0.08
Aban Offshore	**0.18**	**0.37**	**2.85**	**0.06**	**0.18**
GAIL	0.13	1.35	1.2	0.18	0.22
Gujarat Gas Company	0.13	2.08	1.06	0.26	0.28
RIL	0.1	1.01	1.52	0.1	0.16
Jindal Drilling Industries	0.06	2.26	1.19	0.13	0.15
IOC	0.03	3.2	1.86	0.11	0.2
BPCL	0.02	2.26	2.08	0.04	0.08
HPCL	0.02	4.9	2.01	0.08	0.17

After the three ratios are calculated and re-arranged the companies.

Table 4.8.13: Company Ranking After TAT, ROA, and ROE

Rank by TAT	Rank by ROA	Rank by ROE
HPCL	Gujarat Gas Company	Gujarat Gas Company
IOC	ONGC	ONGC

BPCL	GAIL	GAIL
Jindal Drilling Industries	Jindal Drilling Industries	IOC
Gujarat Gas Company	IOC	Aban Offshore
GAIL	RIL	HPCL
RIL	HPCL	RIL
ONGC	Hindustan Oil Exploration Company	Jindal Drilling Industries
Aban Offshore	Aban Offshore	Hindustan Oil Exploration Company
GSPL	BPCL	BPCL
Hindustan Oil Exploration Company	GSPL	GSPL

Table 4.8.14: NPM, TAT, EM, ROA & ROE of Oil & Gas Companies

Company Ranking	Hindustan Oil Exploration Company	ONGC	GSPL	Aban Offshore	GAIL	Gujarat Gas Company	RIL	Jindal Drilling Industries	IOC	BPCL	HPCL
NPM	0.33	0.28	0.19	0.18	0.13	0.13	0.1	0.06	0.03	0.02	0.02
TAT	0.2	0.74	0.22	0.37	1.35	2.08	1	2.26	3.2	2.26	4.9
Equity Multiplier (EM)	1.19	1.19	1.96	2.85	1.2	1.06	1.5	1.19	1.86	2.08	2.01
ROA (NPM*TAT)	0.07	0.21	0.04	0.06	0.18	0.26	0.1	0.13	0.11	0.04	0.08
ROE = EM*ROA	0.08	0.25	0.08	0.18	0.22	0.28	0.2	0.15	0.2	0.08	0.17

Comments: The above table depicts the NPM, TAT, Equity multiplier and ROE, of selected Oil and Gas companies. The above table shows the increase in ROE

Table 4.8.15:Correlations Descriptive Statistics

	Mean	Std. Deviation	N
NPM	.1336	.10414	11
TAT	1.6900	1.44879	11
EM	1.6464	.55649	11
ROA	.1164	.07229	11
ROE	.1682	.06838	11

Table 4.8.15:Correlations

		NPM	TAT	EM	ROA	ROE
NPM	Pearson Correlation	1	-.783	-.266	.132	-.031
	Sig. (2-tailed)		.004	.429	.699	.927
	N	11	11	11	11	11
TAT	Pearson Correlation	-.783	1	.068	.048	.194
	Sig. (2-tailed)	.004		.842	.889	.567
	N	11	11	11	11	11
EM	Pearson Correlation	-.266	.068	1	-.691*	-.317
	Sig. (2-tailed)	.429	.842		.019	.342
	N	11	11	11	11	11
ROA	Pearson Correlation	.132	.048	-.691*	1	.881
	Sig. (2-tailed)	.699	.889	.019		.000
	N	11	11	11	11	11
ROE	Pearson Correlation	-.031	.194	-.317	.881**	1
	Sig. (2-tailed)	.927	.567	.342	.000	
	N	11	11	11	11	11

* Correlation is significant at the 0.05 level (2-tailed).

 ISBN: 978-81-910118-7-6

From the above table it is seen that there a negative correlation between Return on Equity and Net Profit margin. In case of ROE and TAT there is a positive correlation which is not significant. In case ROE and Equity multiplier there is a negative correlation which is not significant. In case of ROE and ROA there is a significant correlation.

Finding and Observations:

1) The Indian Oil and Gas Sector being the primary domain of the public sector companies, the equity market is less attractive, while debt financing continuous to be preferred mode. Within debt financing, overseas markets are more popular than the domestic due to cost differentials in rising funds.
2) The net profit margin of down stream player are low as compared to up stream players
3) The fixed assets turn over ratio of down stream player is highest, which shows there is greater efficiency of fixed assets utilization.
4) The ROCE of Gujarat and ONGC are highest which indicates there is a better utilization of capital resources.
5) Using Du Point analysis it is found that the increased ROE of selected oil and gas company are misleading, they are not due to Net profit margin.

Conclusion:

Du Pont Model is only a brief overview of the financial analysis, it allows the analyst to "work backwards" to identify areas of a company that may need some management attention. The Du Pont analysis was done by calculating ROS, ROA and ROE for the selected oil and gas companies.

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Do Grade of an IPO Improve Demand and Underpricing

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Abstract:

SEBI, the Indian securities market regulator had set a unique example for the entire world when they introduced mandatory IPO grading in India with effect from May 2007. Though the purpose of this grading was to provide retail investors with a ready-made assessment of the fundamental quality of the issuer of an IPO, so they could make a better and informed investment decision in an era of information overload, it faced severe criticism from all players of the market. Using a data set of 355 IPOs, inclusive of 131 graded IPOs, findings of this paper suggest that IPO grading does have strong positive effect on demand (oversubscription) and fairly strong negative effect on underpricing. This paper infers that NII and QIB are more benefitted from grading of IPOs than the retail investors.

JEL Classification: G11, G14, G15, G18, G32.

Key Words: *IPOs, IPO Grading, underpricing, oversubscription, retail investors.*

Introduction:

Grading of IPOs, a unique practice worldwide, was introduced in India by Securities and Exchange Board of India (SEBI) after long deliberations introduced it in April 2006 on optional basis. This practice aimed to reduce the information asymmetry among the retail (small or individual) investors (or the less-informed) and the high-end investors (the well-informed) comprising institutions and individuals. This step of SEBI is in its pursuit to safeguard the interests of retail (small) investors. Later, effective May, 2007, it was made mandatory. Since beginning, however, this grading was criticized almost all market players. Bowing to the resistance from all players of the market, SEBI has once again made it optional with effect from December 2013[1].

Indian IPO market is different from rest of the markets of the world. One, it involves large number of retail (small) investors[2], which more-often be more than 99 percent of the total applicants. Two, the levels of oversubscription are way too high (see Table- 5) and can go beyond 100 times of the size of the issue. Three, the poor financial literacy of the small investors, result in unsophisticated investment decisions. And fourth, negligible number of IPOs getting cancelled or withdrawn. Earlier, there was no method to stop dubious entrepreneurs from raising funds from the market and vanish afterwards[3] (Deb and Marisetty, 2008). In all such cases, only the retail investor is the worst sufferer. *"The unsophisticated investors*

 ISBN: 978-81-910118-7-6

either do not read the disclosure documents or lack the analytical sophistication to understand them. Furthermore, inferior investment decisions may occur due to the limited information processing capabilities of lay investors and the 'information overload' produced by the information disclosure" (Jain and Sharma, 2008). Retail investors often follow the 'herd mentality' in their investment decisions and ignore the advice of their professional brokers. Most investors remain dissatisfied with their brokers and rely on their peer group or independent decisions.

With this background, SEBI started consultations with credit rating agencies (CRAs) to work out the framework for equity grading. Other markets of the world are closely monitoring the effect of this process. It is a unique case where SEBI has set a precedent for other markets. According to SEBI, *"There are some variants of the product in other markets, for presale equity reports done by equity broking houses. However, no regulator has initiated ratings of the IPOs in any part of the world."* [4]

Criticism of IPO Grading

Critics are skeptical on the practical result of IPO grading. It suffers from some serious reservations. For one, equity being a 'risk investment', it is difficult to contain all risk into grades, specifically when they influence investors' decision. Also, unlike debt instruments, equity instruments do not have well defined cash flows and time horizons. Further, to make things complicated, market participants do not accept the rating on its face value. Therefore, IPOs with same grade will have different prices and will deliver different performances. Investors evaluate stocks primarily based on price, whereas IPO grading has nothing to do with price of stock.[5] It is not a 'recommendation' to buy or not to buy a stock, but only a hint on the quality of the issuing company. Further, there is no proof available on IPO Grading reducing the information asymmetry. Therefore, no clear evidence is available on preference given towards IPO Grading by the retail investors.

Credit rating agencies (CRAs) are independent agencies and are not accountable to anyone- the investor, the regulator or the issuer. They are not affected by grades or grading process but for their reputation at stake. Since issuers bear the cost of processing the IPO Grading application, possibilities of a bias exist. Grading of IPOs will dissuade Small and Medium Enterprises (SMEs) as well as some established firms from floating IPOs. SMEs having poor fundamentals (and poor grade) may not find investors, while large and other firms belonging to established business houses will not accept any grade below their expectations. Such firms may defer their plans to float an IPO and opt for private placement[6], resulting in a lost opportunity to investors. The cost of raising funds[7] has increased for issuers due to added cost of grading for an IPO.

Justification for IPO Grading

Everybody do not oppose IPO Grading. Few are providing justification for IPO Grading. Jain and Sharma (2008) mention in

their paper that if successful, it will further the aim of the investor protection. Further, it will restrict the entry of low quality IPOs. Saha (2006) also enumerated positive features of IPO Grading. For one, it provides professional and independent appraisal by an expert and specialized agency. Two, it removes information load since investors need not analyze the complex technical information themselves. Three, it also serves as impediment for companies with poor quality fundamentals. And fourth, it also improves investors' sophistication since they can make better informed investment decision.

This paper is an attempt to verify the performance of graded IPOs with data of 131 graded IPOs out of total 355 IPOs that were offered during the period September 1999 to February 2014 and got listed at National Stock Exchange (NSE), Mumbai, India. . This study evaluates – a) investors preference to grading of an IPO using Demand (subscription) Analysis; and b) Underpricing trend in Graded IPOs compared with non-graded IPOs. Findings suggest that Grading is directly correlated with demand (subscription) and is inversely correlated with underpricing. The results are very much in consistent with some of the earlier studies.

This paper is divided into following subparts. Introduction is followed by conceptual framework and review of literature. Thereafter, objectives and hypothesizes of the study are enlisted followed by research methodology, data analysis and results. Finally, the summary and conclusions arrived at are presented.

Conceptual Framework:

Indian new equity issue market, commonly known as IPO Market is different from rest of the world due to the number of investors involved. Typically IPO in India would have three types of investor classes - a) Retail Investors[8] (with reservation of 30 to 35 percent), b) Non-Institutional Investors (NII) or high net worth investors (with reservation of 10 to15 percent) and c) Qualified Institutional Buyers (QIB) or the financial institutions, mutual funds, venture capitalists, etc. (with reservation of 50 to 60 percent). Apart from above, some IPO's do have some provisions for reservations and preferential allotment for their Employees (usually limited to around 1 percent) and Anchor Investors (with reservation of 18 percent of the issue, within QIB quota). The importance of retail investors can be judged from the fact that applications for this reserved one-third quota constitute nearly 99 percent of the total applications received for an IPO[9].

SEBI allows issuers to price their stocks to be issued. Issuers usually seek out help and opinion of the underwriters, experts, investment managers to arrive at a final offer price. Depending on the quoted market price for the stock on the listing day, the offer price of an IPO stock can be categorized, theoretically, as –underpriced, overpriced or right priced. Underpriced stock refers to a situation when quoted market price is higher than the offer price. Reverse of this, quoted market price being lower to the offer price, is called overpriced. And finally, if there is no difference in offer price and quoted market price, it is referred

 ISBN: 978-81-910118-7-6

to as right priced. This is explained below in equation form.

Right Priced: (MP – OP) = (ZERO)

Underpriced: (MP – OP) = (Positive value)

Overpriced: (MP – OP) = (Negative value)

Where, OP = Offer price; MP = Market Price.

IPO Grading – The Concept:

The studies by Saha (2006) and Jain and Sharma (2008) deliberate at length on the conceptual issues of the IPO Grading. Credit Rating Agency (CRA's), registered with SEBI, assigns IPO Grading. There are five Credit Rating Agencies registered with SEBI currently. These are Brickwork Ratings (BWR), Credit Analysis Research Limited. (CARE), CRISIL, FITCH Ratings, and ICRA Limited. While first two CRA's are of Indian background, the last three are affiliates of renowned international organizations. CRA's assign grades to the initial public offering (IPO) of equity shares or any other security which are convertible into or exchanged with equity shares later. Grade represents a relative assessment of the fundamentals of that issue relative to other existing equity securities in India. IPO Grading done on a five-point scale from lowest 1 to highest 5 score. Lowest Grade 1 represent 'poor fundamentals', Grade 2 represent 'below average fundamentals', Grade 3 represent 'average fundamentals', Grade 4 represent 'above average fundamentals' and Grade 5 represent 'strong fundamentals'. Thus, a higher score signals stronger fundamentals and vice-versa[10]. IPO grading evaluates the issuer company on multiple and broad parameters, ranging from current operations, potential growth, competitive strength and financial position to management quality, corporate governance and historical background.

Literature Review:

IPO Grading, being new concept, limited empirical reference is available on it. While most studies have covered underpricing and subscription uniformly, others have included liquidity, reputation of the investment bankers and agencies. Saha (2006) studied the conceptual framework on IPO Grading, when it was just introduced. Poudyal (2008) in his working paper studied the efficacy of IPO Grading using regression analysis on 63 IPOs from April, 2005 to November 2008. This study finds less underpricing in better graded IPOs; subscription improves with improvement in grading; short-term liquidity inversely related to IPO grades; and post issue performance of IPOs cannot be explained with grading. Another study involving 115 ungraded and 44 graded IPOs during the period April, 2006 to August, 2008 by Deb and Marisetty (2008) concludes that grading decreases underpricing in IPOs and influences demand by retail investors. Also that graded IPOs attract greater liquidity and exhibit lower risk. Khurshed, et al (2008) studied 251 IPOs inclusive of 47 graded IPOs listed on Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) from 1999 till August, 2008. They conclude that grading does not affect underpricing. They also conclude that grading is more useful to institutional investors rather than retail

investors. Another conclusion given by this study is that book-building process itself offers stronger signal for retail investors as compared to IPO Grading. The results of these studies are summarized in Table 1.

Table 1: Results of Earlier Studies.

Study by	Dependent Variable under Study	Relationship with the Dependent Variable	No. of IPOs under study	Study Period
Deb and Marisetty (2008)	Underpricing	Negative	159	2006-2008
	Subscription Retail	Positive		
	Subscription QIB	Negative		
Poudyal (2008)	Underpricing	Negative	63	2005-2008
	Subscription Overall	Positive		
	Subscription Retail	Positive		
	Returns	Negative (Weak)		
Khurshed, et al (2008)	Underpricing	Negative	251	1999-2008
	Subscription QIB	Positive		
	Subscription Retail	Negative		

Empirical results from above available literature only suggest that a) Grading of an IPO has no relationship with underpricing and returns, b) Total demand (subscription) improves with improvement in grade.

There are several other studies which pertains to performance of certification backed IPOs. Underpricing remains the basis of almost all such studies. Prominent of these studies are enumerated in Table 2.

Table 2: Snap-Shot view of Literature Review

Study by	Nature of Certification	Relationship with Underpricing	Country	Study Period
Beatty (1989)	Auditor Reputation	Negative	US	1975-84
Barry, Muscarella, Peavy, and Vetsuypens (1990)	Venture Capitalist Affiliation	Negative	US	1978-87
James and Weir (1990)	Borrowing relationship with Banks	Negative	US	1980-83
Megginson and Weiss (1991)	Venture Capitalist Affiliation	Negative	US	1983-87
Rajan and Servaes (1997)	Degree of Analysts Coverage	Positive	US	1985-87
Carter, Dark and Singh (1997)	Underwriter Reputation	Negative	US	1979-91
Hamao, Packer and Ritter (2000)	Institutional Affiliation	Positive	Japan	1989-95
Dewenter, Novaes and Pettway (2001)	Business Group Affiliation	Positive	Japan	1975-87
Loughran and Ritter (2004)	Underwriter Reputation	Positive	US	1990-2000*
Lee and Wahal (2004)	Venture Capitalist Affiliation	Positive	US	1999-00
Chemmanur and Paeglis (2004)	Manageme-nt Quality	Negative	US	1993-96
Marisetty and Subrahma-nyam (2008)	Family Business group affiliation	Positive	India	1990 -2006

*insignificant positive relationship during 1980-89 and 2001-03.

Source: Deb and Marisetty (2008).

 ISBN: 978-81-910118-7-6

The paper by Khanna and Palepu (2000) is touted to be the first such paper to address the issue of certification of IPOs in Indian market where institutional voids are observed. They argue that in markets where there are voids in the product, labor and capital markets, firms organize as business groups to overcome institutional voids. Therefore, affiliation to a business group acts as a certification and firms affiliated to such business groups are valued higher than others. Similar other studies by Chemmanur and Fulghieri (1999), Allen Faulhaber (1989), Grinblatt and Hwang (1989), Welch (1989), Chemmanur (1993) provide conflicting conclusions to underpricing. Loughran and Ritter (2001), Carter, Dark and Singh (1997), Megginson and Weiss (1991), Carter and Manaster (1990), Barry, et al (1990), Lee and Wahal (2004) have studied the role of underwriters and venture capitalists and their influence on underpricing. Empirical results of these studies provide conflicting and inconclusive viewpoint on underpricing.

Objective of the Study:

Primary purpose of this study is as follows:

1. To find whether grading of IPOs is used as a basis of investment decisions by the retail investors.
2. To evaluate whether grading of IPOs has any effect on performance of stock.

Hypothesis:

Grading and Demand (Subscription)

In view of the first objective, we undertake to do subscription analysis to find the demand/ preference for the IPOs. Accordingly, we have following hypothesis:

Null Hypothesis (H01) – Grading of an IPO has NO effect on Subscription.

Alternate Hypothesis (H11) - Grading of an IPO has DIRECT relationship with Subscription.

Assumptions: The purpose of grading is to provide investors information on the strength of the fundamentals of the company. If this information is accepted by the investors then there would be more demand for higher graded IPOs. This demand would be reflected in the increase in the level of subscription as the grade increases.

Grading and Underpricing:

In view of the second objective, we use Underpricing for evaluating effect of IPO grades. Accordingly we have following hypothesis:

Null Hypothesis (H03) – Grading of an IPO has NO effect on Underpricing.

Alternate Hypothesis (H13) - Grading of an IPO has INVERSE relationship with Underpricing.

Assumptions: An IPO with higher grading signals strong fundamentals. Therefore, the demand for shares of such IPO shall also be high. This means that issuer shall have the opportunity to price the issue aggressively and maximize the realization. This will minimize the extent of underpricing. Thus, the level of underpricing must decrease with the increase in the grade. In other words, underpricing should

reflect negative relationship with grades.

Research Methodology:

Data on IPOs, the closing prices, the Index values, the Subscription details are collated from Prime Database and the websites of NSE, SEBI and ICICI Direct.

Sample:

The data under consideration here is presented in the Table 3. There were total 448 public offers through book building process from the period September 1999 to February 2014. Of this 13 were cancelled or withdrawn. Of the remaining 368 offers were listed on NSE. Our sample is of 355 offers stocks/issues of companies for which relevant data was available. The sample makes 96.47 percent of the population. This includes 131 graded IPOs issued and listed during the above mentioned period. Thus, the overall sample comprises 63.10 percent non-graded IPOs and 36.90 percent graded IPOs.

Table 3: Sample Selection

Year	No.of Offers	listed on NSE (Population)	Withdrawn / Cancelled	Sample (Nos)	Sample (% of Population)	Graded IPOs included in Sample (Nos)	Share of Graded IPOs in the Sample (%)
1	2	3	4	5	6	7	8
1999-00	4	3	0	2	66.67		
2000-01	11	9	0	5	55.56		
2001-02	1	1	0	2*	200.00		
2002-03	2	1	0	2*	200.00		
2003-04	14	8	0	6	75.00		
2004-05	18	15	0	15	100.00		
2005-06	70	59	0	47	79.66		
2006-07	78	67	1	69*	102.99	1	1.45
2007-08	81	72	4	70	97.22	10	14.29
2008-09	18	15	0	18*	120.00	5	27.78
2009-10	44	39	0	34	87.18	33	97.06
2010-11	57	44	2	49*	111.36	48	97.96
2010-12	35	25	2	23	92.00	23	100.00
2012-13	12	8	3	10*	125.00	9	90.00
2013-14	3	2	1	3*	150.00	2	66.67
Total	448	368	13	355	96.47	131	36.90

Notes: Number of offers and population (Column 2 & 3) are based on offer closing date. Sample numbers (Column 5) are based on Listing Date.

* Sample variation from population due variation in dates.

Period : September 1999 to January 2014.

Source: Primarily NSE, SEBI and Prime Database.

Variables:

Data is analyzed for - a) Subscription to the IPO at Overall level, as well as at the levels of Retail Investor, Non-Institutional Investors (NII) and Qualified Institutional Investors (QIB) and b) Underpricing based on the closing price of the stock on the listing day.

Methodology:

The data collated for above variables and measures of central tendency are

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obtained for initial outcome. Pearson's Product of Movement Test for Correlation was applied to assess correlation between IPO Grades and the respective variable. The outcome values of this test lie between 1 and -1 with 0 being neutral. Negative value of correlation signals 'inverse' relationship while positive value signals 'direct' or parallel relationship. Final inferences were drawn using correlation.

Data Analysis and Results:

Demand (Subscription) Analysis:

The demand (subscription) pertaining to IPOs is collated and presented in Table 4 below. Data is presented at each grade level, at total grade level, total non-grade level and then at total (overall) level for subscription at Overall, Retail, NII and QIB segments. Effort is put in specifically to capture wide view by including high and low figures respectively. The market shares of IPO Grades from lowest 1 to highest 5, signals supremacy of Grade 3 with 35.88 percent market share. Grade 2 with 28.24 percent and Grade 4 with 24.43 percent market share, are in close proximity of each other at second and third position. Next to follow is Grade 1 with 8.4 percent and lastly, Grade 5 with 3.05 percent market share respectively.

Table 4: Demand (Subscription) Analysis

IPO			Overall Over-Subscription (Times)			Retail Over-Subscription (Times)			NII Over-Subscription (Times)			QIB Over-Subscription (Times)		
Category	Nos	%	High	Low	Mean	High	Low	Mean	High	Low	Mean	High	Low	Mean
Grade 1	11	8.40	9.42	1.02	2.7	14.22	0.35	3.87	30.54	0.38	5.46	4.26	0.03	1.06
Grade 2	37	28.24	51.32	0.94	5,52	83	0.14	6.54	128.61	0.02	13.49	54.15	0	5.49
Grade 3	47	35.88	62.84	0.97	9.62	36.71	0.08	4.65	179.7	0.06	19.49	96.04	0	11.48
Grade 4	32	24.43	110.27	1.06	21.44	43.55	0.17	6.72	162.59	0.09	35.98	153.07	1.33	30.78
Grade 5	4	3.05	56.16	5.34	21.45	32.35	2.28	11.93	142.41	6.18	49.02	49.21	1.93	21.38
Graded Total	131	36.90	110.27	0.94	11.13	83	0.08	5.85	179.7	0.02	21.55	153.07	0	13.03
Not Graded	224	63.10	159.4	0.91	24.16	211.51*	0.1	14.12	316.46	0.05	35.25	185.09	0.02	28.9
Total	355	100	159.4	0.91	19.32	211.51*	0.08	11.01	316.46	0.05	30.06	185.09	0	23.27
Pearson's Product of Correlation					0.95			0.82			0.98			0.86

*Highest value is 5555.63 times in case of Bharati Shipyard Ltd.IPO listed on 30 Dec, 2004. Being on extreme side, it was isolated.

Above figures are calculated on IPOs that were offered and listed onNSE during the period September 1999 to February 2014.

Source: Prime Database and Website of NSE, ICICI Direct, Capital Markets and India infoline.

The average subscription levels in graded IPOs are around half that of non-graded IPOs across all investor classes. This does indicate that subscription levels have decreased

for graded IPOs. It may be due to the timing factors. The kind of pre-2007 euphoria seems to be lacking in the post-2007 period due to stringent disclosure norms by SEBI. Nevertheless, the mean subscription in all segments is consistently increasing with improvement in the IPO grades. The positive correlation coefficient in excess of 82 to 98 percent is also signaling a strong positive direct relationship between grades and subscription, thus confirming our hypothesis that IPO Grades have positive relationship with subscription (demand). NII and QIB segment with average subscription of 21.55 and 13.03 times show higher values (and demand) than the Overall segment at 11.13 times for graded IPOs. This signals that they rely more on the IPO grades compared to the retail investors.

Analysis of Underpricing:

The Table 5 reviews the trend of underpricing in our sample of 355 IPOs. Mean level of underpricing at overall level is at 22.02 percent and for 224 non-graded IPOs, it is at 29.02 percent. But for 131 graded IPOs the mean underpricing is 9.95 percent. As was expected, IPO Grade 1 reflects highest level of underpricing at 27.66 percent. However, contrary to expectations; Grade 5 with 23.23 percent is second highest. Grade 3 with 5.63 percent is the lowest in all grades creating a 'u-shaped' relationship between IPO grades and underpricing. The Pearson's Product of Correlation Coefficient of -3.9 percent signals weak and negative (inverse) relationship between underpricing and grades, meaning underpricing reduces as the grade improves.

Table 5: Underpricing Analysis

	Overall Underpricing			Exclusive Overpricing					Exclusive Underpricing				
IPO Type	Nos	%	Mean (%)	Nos	%	High (%)	Low (%)	Mean (%)	Nos	%	High (%)	Low (%)	Mean (%)
Grade 1	11	8.40	27.66	3	8.82	-30.36	-23.5	-27.7	7	25.67	129.5	12.8	55.3
Grade 2	37	28.24	9.53	17	50.00	-68.72	-0.6	-26.6	20	73.33	76.71	0.7	40.2
Grade 3	47	35.88	5.63	22	64.71	-52.6	-2.2	-15.9	23	84.33	102.6	0.1	26.5
Grade 4	32	24.43	16.11	7	20.59	-17.3	-3.5	-9.6	25	91.67	83.06	0.5	15
Grade 5	4	3.05	23.23	1	2.94	-3.75	-3.75	-3.75	3	11.00	39.82	9.3	24.4
Graded Total	131	36.90	9.95	50	38.17	-68.7	-0.63	-19.9	78	59.54	129.5	0.1	28.8
Not Graded	224	63.10	29.02	71	31.70	-83.7	-0.1	-16.7	152	67.86	283.71	0.2	48.7
Total	355	100	22.02	121	34.08	-83.7	-0.1	-17.7	231	65.07	283.71	0.1	42.7
Pearson's Product			-0.039					0.981					-0.876

Above figures are calculated on IPOs that were offered and listed onNSE during the period September 1999 to February 2014.

Source: Primarily NSE website and Prime Database.

 ISBN: 978-81-910118-7-6

The analysis of underpricing remains incomplete without taking the view of overpricing. It was observed that 121 IPOs constituting 34.08 percent of total 355 were overpriced. This includes 50 graded IPOs (38.17 percent of 131 IPOs) and 71 non-graded IPOs (31.40 percent of 224 IPOs). The mean level of overpricing among these 121 IPOs was -17.57 percent. The overpricing level was higher in case of non-graded IPOs reaching high of -83.7 percent with average of -16.7 percent. At -19.9 percent average, graded IPOs were weaker than non-graded IPOs. Grade 2 IPO resulted in high of -68.72 percent. However, the average overpricing of -27.7 percent was highest in Grade 1 IPOs. The Pearson product of correlation coefficient of 98 percent signals strong positive relationship between grades and overpricing. This represents reduction in the level of overpricing as grades improve.

When observed on exclusive basis, underpricing is recorded at 42.7 percent for 231 IPOs constituting 65.07 percent of total 355 IPOs. The 152 non-graded IPOs, constituting 67.86 percent of total 224 IPOs recorded 48.7 percent underpricing with high of 283.7 percent. Graded IPOs constituting 59.54 percent (78 out of total 131) averaged 28.8 percent with high at 129.5 percent. A declining trend is noted in the average levels of underpricing as we move from Grade 1 towards Grade 5. Grade 1 with 55.3 percent is highest while Grade 4 with 15 percent is lowest. The negative relationship though not very strong signaled by -87.5 percent correlation coefficient, confirms inverse relationship between grades and underpricing.

Summary and Conclusion

Indian securities market regulator SEBI achieved a distinction of being the innovator of equity grading in the world. Grading of IPOs in India is mandatory effective May, 2007. This study analyzed 355 IPOs which included 131 graded IPOs to explore the effect of grading on subscription and underpricing and draw conclusions.

Primary objective of IPO grading remains to guide retail investors for a better investment decision. Our results suggest positive correlation of IPO grades with oversubscription at overall level as well as investor class level. This signals that investment decisions of all types of investors are influenced by IPO grades. These results only strengthen findings of all previous studies. Additional research is suggested to analyze the extent of preference given by retail investors to IPO grades. Results also suggest that demand increases with improvement in IPO grades among high net-worth, well-informed, investor categories, NII and QIB. This can be viewed as a signal to the acceptance and credibility of the IPO grading process.

This study is not able to establish very strong relationship between IPO grades and underpricing. However, a weak negative (inverse) correlation between grades and underpricing (and overpricing), do support the results of few earlier studies of Deb and Marisetty (2008), Poudyal (2008) and Khurshed, et al (2008). Results also suggest that grading has reduced the levels of underpricing as well as overpricing.

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1 The Hindu dated December 24, 2013 (available at http://www.thehindu.com/business/industry/sebi-makes-ipo-grading-mechanism-voluntary/article5498323.ece).

2 According to SEBI, individuals investing up to Rs. 1.0 lakhs in Public Issues (IPOs & FPOs) are qualified as Retail Investors. This limit is increased to Rs. 2.0 lakhs w.e.f. October, 2010.

3 Refer to the case of vanishing companies / fly-by-night operators of 1992-96 during post-CCI abolishment. Nothing has been done till date to apprehend the culprits due to voids in our regulatory and institutional framework. Bombay Stock Exchange President, Mr. J. C. Parikh quoted in a leading financial news paper, financial express published on the 20th December 1998

4 Saha (2006)

5 According to SEBI: "As the IPO grading does not take cognizance of the price of the security, it is not an investment recommendation. Rather, it is one of the inputs for the investor to aid in the decision making process. All other things remaining equal, a security with stronger fundamentals would command a higher price"

6 According to Mr. Prithvi Haldea, Managing Director of Prime Database of the IPO market, "there are no incentives for the companies to rate their IPOs. First, there is no rating of IPOs anywhere in the world and thus there are no models. If a company accepts a particular rating, the concerned agency would have to report it to the SEBI and stock exchanges within the same month, which makes it public information. In such a case, a good company will not go for rating fearing that if it gets a bad rating its issue may suffer despite strong fundamentals. Similarly, a bad company too would not go for rating fearing that its cover-ups might get exposed with a poor rating." Sourced from Saha (2006)

7 The Economic Times, Nov 10, 2008.

8 According to SEBI, individuals investing up to Rs. 1.0 lakhs are qualified as Retail Investors.

9 Based on the study of 90 IPOs.

10 FAQ's on IPO Grading. Retrieved from SEBI website.

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An Analytical Study on Microfinance in India

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Abstract:

Microfinance sector has travelled a long journey from micro savings to micro credit and then to micro enterprises and now entered the field of micro insurance, micro remittance and micro pension. This gradual and evolutionary growth process has given a great opportunity to the rural poor in India to attain reasonable economic, social and cultural empowerment, leading to better living standard and quality of life for participating households. Financial institutions in the country continued to play a leading role in the microfinance program for nearly two decades now. During the current year too, microfinance has registered an impressive expansion at the grass root level. This paper aims to provide a snapshot of the progress in the microfinance sector since 2006-2011. Most of the banks participating in the process of microfinance have reported the progress made under the program. The various parameters taken for analyzing the financial performance of MFIs and banks. The data presented in this paper covers information relating to savings of Self Help Groups (SHGs) with banks from 2006-07 to 2010-11, loans disbursed by banks to SHGs during the year 2006-07 to 2010-11, loans outstanding of the banking system against the SHGs. Based on these data and information, this paper attempts an assessment of progress on varied dimensions of the microfinance sector.

Key Words: *Microfinance, MFIs, SHG, SGSY, NPA.*

Introduction:

The term microfinance refers to extending the whole range of financial services from saving to credit to micro insurance to micro enterprises and lot more for the poorer sections of the society whose scale of operation are so small. This led to launching of the Self Help Group –Bank Linkage Program in 1992 on a pilot basis by NABARD. Initially they link 500 SHGs and now the figure is 7461946. Huge untapped population provides unlimited scope to microfinance companies for market expansion and penetration. So following models are developed for the expansion of microfinance business.

Models of Microfinance:-

- SHG – Bank Linkage Model: This model involves the SHGs financed directly by the banks viz., CBs (Public & Private Sector), RRBs & Cooperative Banks.
- MFI – Bank Linkage Model: This model covers financing of Micro Finance Institutions (MFIs) by banking agencies for on-lending to SHGs & other small borrowers.

 ISBN: 978-81-910118-7-6

Need of the study: Micro finance aims at assisting communities of the economically excluded to achieve greater levels of asset creation and income security at the household and community level. Access to financial services and the subsequent transfer of financial resources to poor women enable them to become economic agents of change. Women become economically self-reliant, contribute directly to the well being of their families, play a more active role in decision making and are able to confront systematic gender inequalities. Access to credit has long been considered a major poverty alleviation strategy in India. Micro credit has given women in India an opportunity to become agents of change. Poor women, who are in the forefront micro credit movement in the country use small loans to jump start a long chain of economic activity. The study is basically intended to analyze the condition of micro finance industry in India.

Literature Review:

As mentioned by Emerlson Moses in their research paper "An overview of microfinance in India", Credit lines to SHGs are critically limited, as they are based on a certain multiple of SHG member's savings accounts within banks. While the cumulative savings of SHGs could serve as a low-cost source of funds for on-lending, their potential is limited by the lack of aggregated savings across SHGs. Commercial equity investments are not available to for SHGs due to heir informal status. Yet, there has been concerted effort both by the formal and informal sector institutions to reach out to the rural as well as urban poor masses with definite schemes of micro finance programme. Over the years there has been steady progress in the field of micro finance. According to NABARD, almost 3 million SHGs have linked to nearly 600 banks since the program started, reaching over 11 million house hold across.

As concluded by RANJULA BALI SWAIN SHGs, where a majority of groups are linked with the help of NGOs that provide support in financial services and specialized training, have a greater ability to make a positive impact on women empowerment. They found that microfinance tries to assist the communities of economically excluded for achieving greater levels of asset creation and income security of the household and community level. Micro Finance System have included five key players viz. National Bank for Agricultural and Rural Development (NABARD), Reserve Bank of India (RBI), Self Help Groups (SHGs), Micro Finance Institutions, Non Government Organizations. Microfinance is being practiced as a tool to attack poverty the world over. The term "Microfinance" could be defined as "provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi urban or urban areas, for enabling them to raise their income levels and improve living standards" (NABARD 99). Microfinance Institutions (MFIs) are those, which provide thrift, credit and other financial services and products of very small amounts mainly to the poor in rural, semi-urban or urban areas for enabling them to raise their income

Objectives of the Study:

1. To analyze the condition of micro finance business in India.
2. To analyze the impact of model of microfinance on micro finance business in India.
3. To analyze the aggregate amount of Bank loans disbursed to SHGs by various banks;
4. To analyze amount of loans outstanding of the banking system against the SHGs and the details of Non-Performing Assets (NPAs) and recovery percentage in respect of bank loans provided to SHGs.

Research Methodology

Type of Research : Descriptive and Analytical Research

Data Collection : The research is based on the secondary data.The sources are official websites of the banks and the financial institutions. Duration considered for the data collection is from the financial year 2006-07 to 2010-2011.

Statistical Tool-s : Bar graphs and simple tabulation.

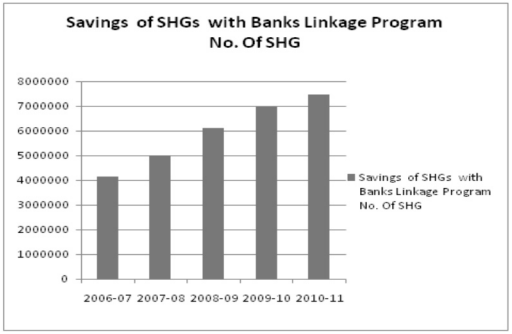
Data Analysis and Interpretation

1) SHG – Bank Linkage Model

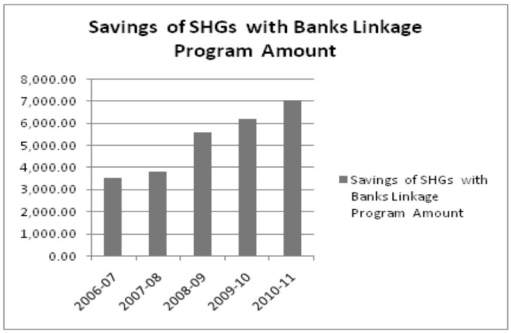
Savings of SHGs with Banks Linkage Program - No. Of SHG & Amount (Rs in crore)

Table No1

No Of Years	Year	2006-07	2007-08	2008-09	2009-10	2010-11
Savings of SHGs with Banks Linkage Program	No. Of SHG	4160584	5009794	6121147	6953250	7461946
Percentage of No Of SHG	In %		20	22	14	7
Bank Saving Amount of SHGs during the year	No. Of SHG	1105749	1227770	1609586	1586822	1196134
Percentage Bank Loans disbursed to no of SHGs	In %		11.04	31.10	-1.41	-24.62



Graph No 1



Graph No 2

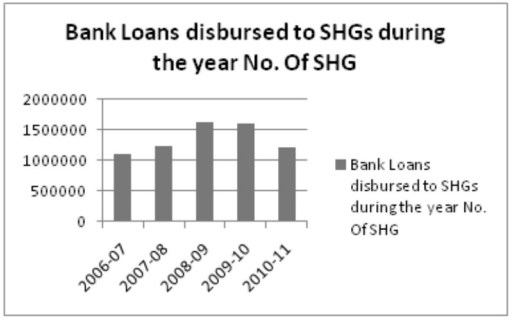
 ISBN: 978-81-910118-7-6

The analysis of data presented in table-1 indicate that from year 2006-07 to 2010-11 the no. of shg group is increasing from 41.60 lakh to 74.61 lakh. The saving amount has also praportionatly increasing from 2006 to2009, 11.05 core to 15.86 core, and it has decreased only in 2010-11 by 24%.

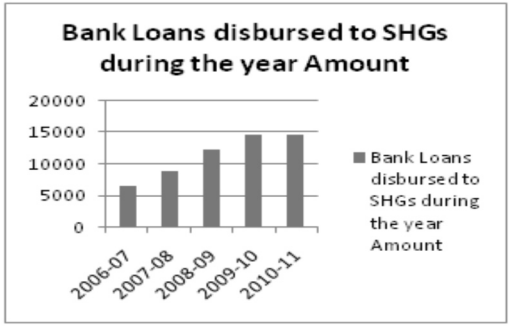
Bank loans disbursed to SHGs during the year - No. of SHG & Amount (Rs in crore)

Table No-2

No.of Years	Year	2006-07	2007-08	2008-09	2009-10	2010-11
Bank Loans disbursed to SHGs during the year	No. Of SHG	1105749	1227770	1609586	1586822	1196134
Percentage Bank Loans disbursed to no of SHGs	In %		11.04	31.10	-1.41	-24.62
Bank Loans disbursed to SHGs during the year	No. Of SHG	6570.39	8,849.26	12253.51	14453.3	14547.7
Percentage Bank Loans disbursed Amount	In %		34.68	38.47	17.95	0.65



Graph No 3



Graph No 4

The analysis of data presented in table-2 infer that during the year 2009-10, banks have financed 15.86 lakh SHGs, including repeat loan to the existing SHGs, with bank loans of Rs.14,453.30 crore as against 16.09 SHGs with bank loans of Rs.12,253.51 crore during 2008-09, registering a decline of 1.4 per cent of SHGs but a growth of 17.9 per cent in bank loans disbursed. However, during the year 2010-11, banks extended fresh loans to the extent of Rs.14,547.73 crore to 11.96 lakh SHGs.

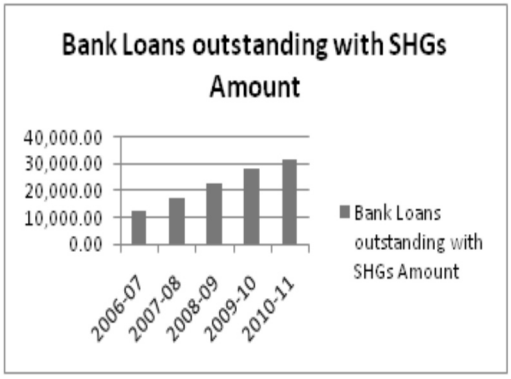
One thing is notable from the data that in the years 2010-2011 the loans disbursed to the no of SHG has decreased substantially but the loan amount is almost the same as of the previous year.

Bank Loans outstanding with SHGs -No. Of SHG & Amount (Rs in crore)

Table No3

No Of Years	Years	2006-07	2007-08	2008-09	2009-10	2010-11
Bank Loans outstanding with SHGs	No. Of SHG	2894505	3625941	4224338	4851356	4786763
Percentage Bank Loans outstanding with SHGs	In %		25.27	16.50	14.84	-1.33
Bank Loans outstanding with SHGs	Amount	12,366.49	16,999.91	22679.84	28038.28	31221.2
Bank loans outstanding Amount	In %		37.47	33.41	23.63	11.35

Graph No 5



Graph No 6

As on 31 March 2009, total number of 42,24,338 SHGs were having outstanding bank loans of Rs. 22,679.85 crore as against 36,25,941 SHGs with bank loans of Rs. 16999.90 crore as on 31 March 2008 with a growth rate of 16.5 % (No. of SHGs) and 33.4% (Bank Loan outstanding with SHGs. But in 20010-11 total no of shg 4786763 is decrease as compared to last year, lone outstanding amount is increase with 11.35%.

2) MFI – Bank Linkage Model

Bank Loans disbursed to MFIs during the year - No. Of SHG & Amount (Rs in crore)

Table No 4

No Of Years	Years	2006-07	2007-08	2008-09	2009-10	2010-11
Bank Loans disbursed to MFIs during the year	No. Of SHG	334	518	581	691	471
Percentage of No Of SHG	In %		55	12	19	-32
Bank Loans disbursed to MFIs during the year	Amount	1151.56	1,970.15	3732.33	8062.74	8448.96
Percentage of Bank Loans disbursed to MFIs	In %		71.09	89.44	116.02	4.79

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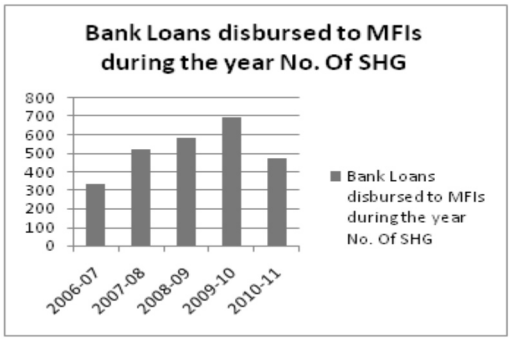
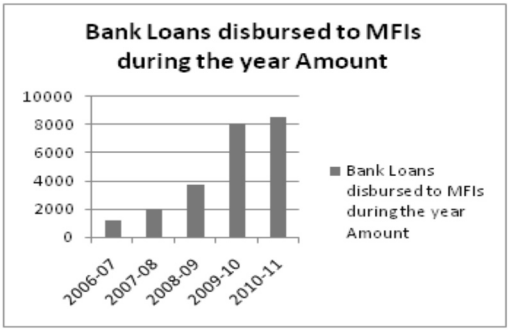


Graph No 7



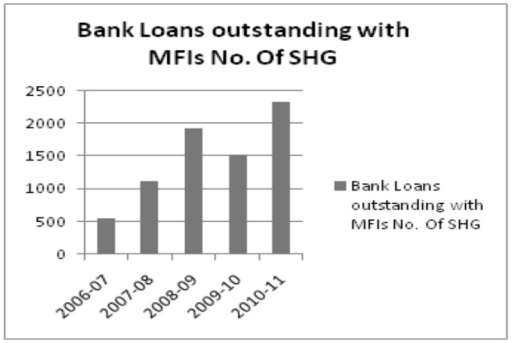
Graph No 8

The analysis of data presented in table-1disclose that during the year 2009-10, banks have financed 15.86 lakh SHGs, including repeat loan to the existing SHGs, with bank loans of Rs.14, 453.30 crore as against 16.09 SHGs with bank loans of Rs.12, 253.51 crore during 2008-09, registering a decline of 1.4 per cent of SHGs but a growth of 17.9 per cent in bank loans disbursed. However, during the year 2010-11, banks extended fresh loans to the extent of Rs.14, 547.73 crore to 11.96 lakh SHGs. There had been a decline of 24.6 per cent in the number of SHGs securing fresh loans from banks during the year as compared to the previous year.

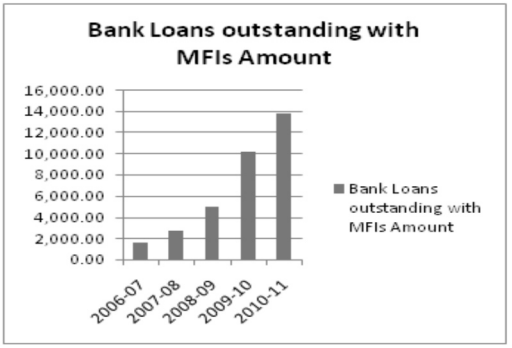
Bank Loans outstanding with MFIs - No. Of SHG & Loans outstanding Amount (Rs in crore)

Table No 5

No Of Years	Years	2006-07	2007-08	2008-09	2009-10	2010-11
Bank Loans outstanding with MFIs	No. Of SHG	550	1,109	1915	1513	2315
Percentage Bank Loans outstanding no of SHG	In %		101.64	72.68	-20.99	53.01
Bank Loans outstanding with MFIs	Amount	1,584.48	2,748.84	5009.09	10147.54	13730.6
Percentage Bank Loans outstanding Amount	In %		73.49	82.23	102.58	35.31



Graph No 9



Graph No 10

As on 31 March 2011, total number of 2315 MFI were having outstanding bank loans of Rs. 13730.06 crore as against 1513 MFI s with bank loans of Rs. 10147.54 crore as the no of shg is increased with 53 % and loan amount is decrease with 35.31% .

Conclusion :

The analysis of data presented in table-1 disclose that from year 2006-07 to 20010-11 the no of SHG group is increasing from 41.60 lakh SHGs to 74.61 lakh. The Table no 2 shows that the amount of loan disbursed is increase from 6570.39 crore to 14547.7 crore the outstanding loan is 12,366.49 crore and 31221.2 crore. In case of MFI linked SHG loan disbursed is 1151.56 crore to 8448.96 and outstanding Loan is 1,584.48 crore 13730.6 crore. So it is concluded that there is close co-relation and significant impact of No of SHG on Saving amount, Loan disbursed, Loan outstanding.

The valuable conclusion drawn from this paper that rural segment of this country is going to play a significant role in the overall development of the nation. And the microfinancing in the form of SHGs and the MFG – Bank linkage progrm are playing a revolutionary role with firms like NABARD. It also concluded through this research paper that when institutions are pushed to decrease their interest rates,or the loan recovery pressure they will look towards increasing their loan sizes, consequently, shifting away from the poorer clients.(2010-11 data)

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Marketing Management- Philip Kotler.(14th edition)

ISBN: 978-81-910118-7-6

A Study of Scope of Widening Social Banking Initiatives by Public Sector Banks in Pune

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Introduction:

Financial systems are the backbone of an economy. Strong and efficient financial structure ensures continuous and rapid economic development of a nation. Apart from economic progress an ethical, balanced and all pervasive financial service will enable socioeconomic progress of bottom of the pyramid and make the economic growth of a nation more meaningful and all inclusive.

Banks in India have to play a greater role in this respect. Policies and practices designed and implemented by Reserve Bank of India, have made banking institutions to play more vigorous part in this regards by undertaking various social banking initiatives from time to time.

Social banking is defined by Dr Roland Benediktar (2011) as banking with a conscience. Here the bank focuses on investing in community, providing opportunities for the disadvantaged, and supporting social, environmental and ethical agenda. Rather than just concentrating on traditional bottom line i.e. profits, bank emphasizes on achieving triple bottom line of profit, people and planet. [1]

So social banking is aiding the society as a whole, instead on just concentrating on own profits. Here the banks give priority to the factors like environment, charity, poverty and education.

Historical Background

The Social Banking initiatives can be traced way back in 1969 when fourteen commercial banks were nationalized with the intention of ending monopoly control of private business houses and corporate families on banks and widening the service web of banking across the country.

Special efforts were taken in order to decrease geographical imbalances through branch multiplication policy wherein it was made mandatory for banks to open four branches in rural unbanked population for getting a license to open one branch in urban developed area. During license raj a tremendous increase in number of branches was witnessed. The number of branches increased to nearly about 60,000 and banking locations increased from 5,000 to 25,000.[2]

Thirdly commercial banks were asked to divert 40% of their net bank credit towards priority sector. Priority sector lending included short, medium and long term credit to agriculture and allied, micro small and medium scale industries, education loan, housing loan, advances to weaker section etc.

 ISBN: 978-81-910118-7-6

Different schemes provided under social banking are Laghu Udhami Credit Card Scheme, Swarojgar Credit Scheme, Kisan Credit Scheme and National Equity Fund to support projects of small entrepreneurs.

In June 2006, a committee under chairmanship of Dr C Rangarajan was established to study Financial Exclusion in greater details. Financial Inclusion Drive was extensively implemented all over India. A time bound initiative to further penetrate banking network to unbanked rural population was taken up on national front. The main tools of financial inclusion are no frill accounts opened through brick and mortor as well as branchless expansion through BC BF model and use of technology. Simplification of procedural aspects like simpler KYC norms speeded the initiative further.

Various initiatives by NARBARD like Bank SHG linkage programmes increased self employment avenues especially for women.

But the sad reality of majority of rural population remaining unserved prevails. Still nearly 51.4% farm households do not have access to credit and only 27% of farm households are indebted to institutional sources.[3] In India, Maharashtra has lowest number of total rural bank offices, number of rural deposit accounts and volume of rural credit.[4]

Review of Literature:

Nirupam Mehrotra, Dr. V. Puhazhendhi, Gopakumaran Nair G, Dr. B. B. Sahoo, (2009), in their Paper on 'FINANCIAL INCLUSION -AN OVERVIEW' have stated that despite the creditable achievements in the field of rural banking, issues such as slow progress in increasing the share of institutional credit, high dependence of small and marginal farmers on non-institutional sources, skewed nature of access to credit between developed regions and less developed regions appear larger than ever before. Therefore, the key issue now is to ensure that rural credit from institutional sources achieves wider coverage.

Dr Gupta, Radha, (2011), in her paper on "Micro Finance: A Social Innovator" emphasizes the need to have more dissemination and adoption of rural agricultural microfinance methodologies, as majority of population belongs to rural area. She further states that no country can afford to ignore substantial population suffering from poverty as it can be costly for the growth of economy.

Singh, Shravan Kumar, (Sept 2010), in his article "Economic Growth and Financial Inclusion in India : An Analysis", notes that growth with equity has been central objective right from inception of planning process, in India. He further explains that farming, micro, small and medium enterprises have immense potential to play a critical role in achieving the objective of faster and more inclusive growth.

Shah, Neha, (2010), in her article "Can Micro Finance Provide A Sustainable Solution for Poverty? Some Empirical Evidences from Gujarat' observes that assistance under micro credit is growing rapidly in India. She further says that loans disbursed by SIDBI and NABARD have grown at the rate of

84.4% and 65.2% respectively during 2004-05 and 2005-06. The two models of RBI, Self Help Group (SHG) and Bank Linkage Programme (SBLP) have already achieved the target to reach 100 million poor by 2007-08. She highlights that banks are willing to do business with poor, believing it as a new source of deposits for banks.

Social Banking: Ground Reality:

Despite of all the policies and practices initiated by banks in India under the leadership of Reserve Bank of India, how far the initiatives are successful in achieving the objectives behind its implementation, is a matter of grave concern.

It is observed that many times banks are successful in achieving the numerical targets set for them but are failing severely to achieve the real motives behind setting up the targets.

Banks are achieving its targets of priority sector lendings in broader sense but have failed to achieve the detailed targets especially in case of agriculture and allied and advances to weaker section. As a result the poor and marginal farmer is yet relying on private money lenders and weaker section largely unserved due to poor absorptive power.

Most of the self help groups remain a means to mediate loan to the politically influenced groups. These groups neither create a strong savings base for the group nor help the group to evolve into a micro enterprise which was the main intension behind initiating SHG bank linkage programme. The success of SHG Bank Linkage programme is limited to disbursement of credit only. Special efforts need to be undertaken so that Self Help Groups will eventually emphasize on mobilizing savings to create its own investment base facilitating them to mature into small enterprises.

Similarly it has been observed that though banks have been successful in achieving targets of number of no frill accounts and 100% inclusion in targeted villages, most of these accounts remain largely inoperative and fail to inculcate banking and savings habits in account holders. Hence no frill accounts are reduced to a medium of disbursing subsidy only.

One of the major hurdles in enhancing banking service network is unawareness among people about use, availability and benefits of formal financial service, largely due to financial illiteracy prevailing on huge scale. Banks have taken initiative in this regards by opening Financial Literacy and Credit Counseling Centers. These centers are mostly used as a marketing gimmick in order to promote various products offered by banks. More meaningful targets could be set for these centers in terms of number of people trained and guided and content of training should be also be upgraded.

Many cooperative banks have specially designed micro savings products and recurring products designed for poor and below poverty line population but suffer because of small scale of operations and no governance in place. Public sector banks can take active initiative in inculcating savings habits in people at large by formulating such savings and recurring schemes for poor.

Banks can guard environmental impacts of their investments by insisting

 ISBN: 978-81-910118-7-6

upon submission of permission to operate issued by Pollution Control Board while lending to MSME wherever applicable which would safeguard our planet.

Banks can try and meet specific targets in housing finance wherein some percentage of finance should go in financing eco friendly projects.

There are various subsidies available for projects on renewable energy sources. Banks can give special importance to such projects and divert a specific percentage of its lending to finance such projects and play leading role in conservation of energy resources.

Apart from just achieving broader targets of agriculture and allied, a specific percentage should go in financing water conserving irrigation techniques like drip irrigation, which would help in conserving our precious water resource.

Under Financial Inclusion Drive banks are concentrating on covering unbanked rural population. Similarly they should be allotted specific targets to cover unbanked urban population mainly residing in slums in order to make financial inclusion more pervasive

No frill accounts can go larger way to mobilize micro savings rather than operating merely as a means of direct benefit transfer of subsidies to the beneficiaries.

These social banking initiatives can be a win win position for both the beneficiaries and the banks as well. Banks can make it a viable business solution by making it a large scale initiative. Use of technology can also help banks in reducing the transaction costs and making it a viable business opportunity.

Research Methodology:

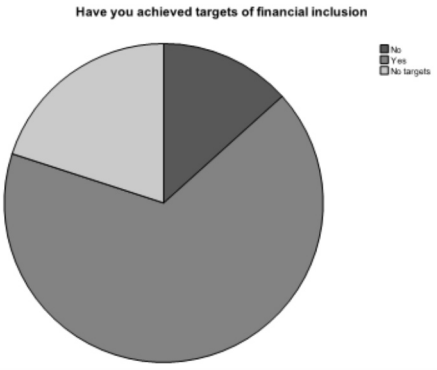
An opinion survey of 30 branches of public sector banks in Pune city was conducted by the researcher with the help of specially designed questionnaire.

With the help of descriptive statistics following opinions were observed.

1. All the banks agreed that banks should undertake social banking initiatives for overall growth of India.
2. Twenty six branch managers out of thirty were of the opinion that social banking includes all of these
    a. Enlarging the banking outreach through brick and mortar branches as well as branchless expansion.
    b. Giving preference to special class/ category while lending money especially by way of Priority Sector Lendings.
    c. Generating self employment opportunities so as to build financial independence especially among women through Bank SHG Linkage Program
    d. Educating people in order to increase awareness about availability of and importance and benefits of using formal financial services provided by banks through FLCC centers.
    e. Creating a healthy investment base for poor/ Below Poverty Line families by offering them tailor made regular micro savings/ recurring products.

f. Taking care of environmental and ethical aspect of its investments and loans.

3. Four managers were of the opinion that social banking initiatives may also include
   a. Opening special branches for senior citizens
   b. Reverse mortgage scheme for senior citizens
   c. Adoption of villages and hamlets by banks
   d. Lok Bachat Yojana
4. When banks were asked about whether they have achieved their targets under financial inclusion
   a. 67% of the banks said to have achieved their targets under financial inclusion
   b. Nearly 13% of the banks have not achieved its targets under financial inclusion
   c. Another 20% have specified that they don't have any targets under financial inclusion



5. Following channels are used presently by banks to increase its network
   a. 83% banks increase network by opening new branches.
   b. But 73% banks are using BC BF model to increase outreach.
   c. 40% of banks are using ulta thin branches for banking service expansion.
   d. Only 37% banks believe opening rural kiosk can be used to increase bank network.
   e. Only 27% banks are using maha online seva to increase banking coverage.
   f. Only 20% banks are using anganwadi workers to serve more people.
   g. Only 17% banks believe in using kirana & pan shops as delivery mode.
6. Following are the difficulties in covering the unbanked areas in villages as well as in urban slums under Financial Inclusion ranked by banks.

Statistics

		Initiatives become costly due to huge low cost transactions	Problem due to poor Infrastructure	People don't have confidence as bank people unknown to them	Lack of availability of trained staff	Difficulty in establishing control over BCBF
N	Valid	30	30	30	30	30
	Missing	0	0	0	0	0
	Median	2.50	1.00	3.50	3.00	3.00

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a. The most critical problem that banks face in increasing its network is unavailability of required infrastructure (which is ranked first by majority of banks).

b. The second important problem is huge number of small value transactions by poor people which makes financial inclusion costly to manage for banks.

c. Similarly the third ranking problems are unavailability of trained staff and difficulty in establishing control over BC / BF.

d. Banks also feel that winning people's confidence is a diificult task for bank officials which are unknown to local people (which is ranked fourth problem by many banks).

7. Following is the statistics about some of the avenues for widening and improving the effectiveness of Social Banking Initiatives which are agreed upon on rating scale by branch managers.

Statistics

		Priority sector lending is a business opportunity banks need to encash	Banks need to develop savings based SHGs	Banks need to develop special micro savings products for poor BPL families	Banks need to ask permission to operate in addition to NOC from Pollution Board	Banks should have specific targets for financing eco friendly houses
N	Valid	30	30	30	30	30
	Missing	0	0	0	0	0
	Mean	4.50	3.97	4.17	4.03	4.17

Statistics

		Banks should have specific targets for financing renewable energy projects	Banks should have specific targets for financing drip irrigation	Banks should have specific targets for covering urban slums in Financial Inclusion	Rather than just benefit transfer No Frill Accounts can play larger role in mobilising savings	Use of technology would help in reducing transation costs coupled with economies of large scale
N	Valid	30	30	30	30	30
	Missing	0	0	0	0	0
	Mean	4.33	4.33	3.97	4.30	4.47

1. Majority of banks have strongly agreed that Priority sector lendings is a business opportunity which banks should explore more.

2. Majority of banks have agreed to the fact that more conscious efforts to develop savings based SHGs would further strengthen SHG movement in true sense. Banks need to concentrate on the same.

3. Majority of banks have agreed to the need of developing specifically designed regular micro savings products/ recurring schemes for poor/ BPL Families. Banks may collect a definite targeted deposit amounts under the same to contribute towards formulating an investment base for the poor.

4. Banks have also agreed that in addition to No Objection Certificate from Maharashtra Pollution Control Board, if they insist upon submission from

time to time, the permission to operate issued by same authority, while lending to MSME they can play major role in safeguarding our planet.

5. Majority of banks have also agreed that by giving preference to eco friendly housing projects, banks can take a positive step ahead in protection of our environment.
6. Banks have strongly agreed for the need of diverting a specific percentage of finance to renewable energy projects (under various schemes like Jawaharlal Nehru National Solar Mission), in order to contribute towards conservation of energy sources.
7. Majority of banks have strongly agreed that they should strive hard for achieving specific targets for financing drip irrigation in order to play pivotal role in judicious usage of water.
8. In order to balance the situation of hyper inclusion of rich people on one hand and total exclusion of poor on the other hand especially in urban areas, banks have agreed upon need for crafting and implementing a special inclusion drive for covering urban slums which will make financial inclusion more encompassing.
9. Banks have also strongly agreed that in addition to direct benefit transfer no frill accounts can be used to mobilize savings of the poor.
10. Banks strongly believe that with the use of technology banks can reduce transaction costs involved. Coupled with economies of scale banks can make the social banking initiatives a viable business solution.

Conclusions:

Rather than concentrating on achieving the broader numerical mandatory targets set by Reserve Bank of India, banks can go a longer way in exercising social banking initiatives in true spirit. Banks should strive hard to make sure that its lending is not polluting environment. Banks can play a leading role in conserving limited resources like water and energy and earth. Banks can concentrate on creating more employment, savings avenues for the poor. Lastly banks should strive hard to increase banking awareness in larger section of the population which is still left out from banking outreach.

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Liberalised Remittance Scheme of RBI: Challenges & Opportunities for Investors

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Abstract:

We all have an interest in gaining independence from rupee-denominated assets. Diversifying assets has long been credited with reducing volatility and enhancing returns in an investment portfolio. By introducing Liberalised Remittance Scheme (LRS), the Reserve Bank of India (RBI) has given resident Indians the nod to invest in non-rupee-denominated assets in foreign markets. If properly researched and utilized, LRS can be a great vehicle for resident Indians to diversify their investments by adding positions of foreign equities and properties. In 2004, as a step towards further simplification and liberalization of foreign exchange facilities available to resident Indians, the Reserve Bank of India (RBI) announced the Liberalised Remittance Scheme (LRS). However study reveals that the response to LRS by Indian Investors is lukewarm over the period of 2004 to 2013. The pattern also does not show any healthy trend. In fact it is stagnant over the period. The LRS is golden opportunity for Investors for balancing of the portfolio and therby maximizing returns. The investor profile also remain more or less of HNI category. Small investor have totally remained absent from LRS. There is also very less degree of awareness amongst Investors about opportunities for outbound investment options. There is also need to simplify the procedure for investment abroad. The LRS is first step by RBI towards full capital account convertability. With increasing demand for financial freedom, it is but obvious that RBI will move towards total capital account convertability. The objective of this study is to evolve the robust and healthy system, so that Indian investors can look forword to have flare of Investment opportunities abroad. There is need to do lot of work from all stake holders point of view : Investors, Regulator, Intermediary etc. India offers good opportunity for Investors in foreign countries. Similarly in these globalization period, we also need to have proper system in place so that Indian Investor will be encouraged to invest abroad. The ultimate objective of any financial policy is to provide complete financial freedom to the Investor. The author have made modest attempt towards indepth analysis of Investors willing to explore Investment options in foreign countries. The balanced view is must so as to have healthy economic progress for the country as well as for the people in the country.

Key Words: *Investment avenues, LRS, Maximising returns, Ideal portfolio, Investment abroad, Outbound Investment, Diversification of assets, Rate of return*

Introduction:

In 2004, as a step towards further simplification and liberalization of foreign

 ISBN: 978-81-910118-7-6

exchange facilities available to resident Indians, the Reserve Bank of India (RBI) announced the Liberalised Remittance Scheme (LRS).

Thanks to this scheme, foreign remittances today can be freely made by residents to the extent of $200,000 per financial year. Remittances made under the LRS can be used to buy property abroad or to invest in shares, mutual funds or debt instruments in any foreign country without prior approval of the RBI.

You probably have an interest in gaining independence from rupee-denominated assets. Diversifying assets has long been credited with reducing volatility and enhancing returns in an investment portfolio. In the case of Liberalised Remittance Scheme (LRS), the Reserve Bank of India (RBI) has given resident Indians the nod to invest in non-rupee-denominated assets in foreign markets. If properly researched and utilized, LRS can be a great vehicle for resident Indians to diversify their investments by adding positions of foreign equities and properties.

Why go global ?

The reason you should consider global investments is that by spreading your money among several markets, you achieve what stock market theorists have been propounding for years : diversification and hedging risk by spreading it across a mix of assets and markets. Individual economies are subject to economic cycles. By investing in several economies at a time, your portfolio can earn smoother returns. The Japanese stock markets have given negative returns for the larger period of time Thus if you remain invested only in particular market, your returns are bound to be affected by country specific economic conditions. Any investor should have opportunity to optimise his portfolio and maximise his returns.

Besides reducing risk through diversification, global investing can also boost your portfolio returns. With no country managing to be at the top of the charts each year, the case for spreading your investments across countries definitely gets stronger.

Three, international investing offers you a chance to take part in the world's booming economies and growing stock markets. For instance, Japanese stock markets have been producing poor returns for almost two decades. For a Japanese investor, venturing abroad and investing in one of the world's better-performing markets is a highly attractive option.

The East Asian financial crisis of 1997 was disastrous, leaving many poorer in those countries. When the currencies of these countries depreciated in value, so did their assets, leaving many who had their entire investments within their countries on the brink of bankruptcy. Their investments were in a single region and currency. This holds true of most Indian investors as well. What if a similar financial crisis occurs here? In such a situation, only diversification across geographies would protect your portfolio.

It is interesting to note that how returns vary drastically from country to country.In 1989, the Nikkei 225 – Japan's equivalent

of the S&P 500 – hit a new all-time high near 40,000. Today, more than 20 years later, it languishes near 14,000, roughly 65% lower.In other words, the Japanese market would have to almost triple just to get back where it was in 1989. In the 1970s, the U.S. market returned just 0.34% a year for a 3.4% total return for the decade. The Japanese market in that period compounded at 16%, generating a 10-year return of 344%. Thus your investment destination also plays very important role in deciding your effective returns.

Nowadays many world class Investment bankers are present in India snd they offer variety of options for Investments abroad. The procedures / transperancy / liquidity is at par with Indian options and thus today Investing abroad is as simple as investing India.

The emerging sectors of economy has resulted in professionals having global flare for Investments. Indian software professionals works all over the globe and given the chance, they are willing to spread their investments all over globe to maximise returns. Large no of such aspiring professionals are emerging as a globalised economy and they expect the freedom for investment across the boundaries.

Salient features of Liberalised Remittance Scheme :

- Under this Scheme, Authorised Dealers may freely allow remittances by resident individuals up to USD 200,000 per financial year (April-March) for any permitted current or capital account transactions or a combination of both.
- The facility is available to all resident individuals including minors.
- The remittances can be made in any freely convertible foreign currency equivalent to USD 200,000 in a financial year.
- Remittances under the facility can be consolidated in respect of family members subject to individual family members complying with the terms and conditions of the Scheme.
- Remittances under the Scheme are allowed only in respect of permissible current or capital account transactions or a combination of both. All other transactions which are otherwise not permissible under FEMA are not allowed under the Scheme.
- Resident individuals are free to acquire and hold immovable property or shares (of listed companies or otherwise) or debt instruments or any other asset outside India without prior approval of the Reserve Bank.
- Once a remittance is made for an amount up to USD 200,000 during the financial year, resident individual would not be eligible to make any further remittances under this scheme, even if the proceeds of the investments have been brought back into the country.
- There is no restriction on the frequency. However, the total amount of foreign exchange purchased from or remitted through, all sources in India during a financial year should be within the cumulative limit of USD 200,000.

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- The limit of USD 200,000 under the Scheme also includes remittances towards gift and donation by a resident individual.
- Remittances under the Scheme can be used for purchasing objects of art subject to the provisions of other applicable laws.
- The Scheme can also be used for remittance of funds for acquisition of ESOPs.
- A resident individual can invest in units of Mutual Funds, Venture Funds, unrated debt securities, promissory notes, etc., under this Scheme. Further, the resident can invest in such securities out of the bank account opened abroad under the Scheme.
- Individuals can also open, maintain and hold foreign currency accounts with a bank outside India for making remittances under the Scheme without prior approval of the Reserve Bank.
- Banks should not extend any kind of credit facilities to resident individuals to facilitate remittances under the Scheme.
- The facility is not available for remittances made directly or indirectly to Bhutan, Nepal, Mauritius and Pakistan.
- For undertaking transactions under the Scheme, resident individuals may use the application-cum-Declaration Form and it is mandatory to have PAN to make remittances under the Scheme.

Remittances made by individuals as per liberalised remittance scheme

Amount In Usd Million

Purpose	2012-13	11-12	10-11	09-10	8-09	TOTAL	%
Deposit	10.06	26.6	18.2	40.2	30.4	125.46	3
Purchase of immovable property	41.63	62.2	48.6	51.4	55.9	259.73	6
Investment in equity/ debt	141.36	239.5	169.7	218.7	151.4	920.66	21
Gift	159.01	244.6	183.2	171.6	133	891.41	20
Donations	3.77	3.5	2	5.5	1.4	16.17	0
Travels	29.78	34.9	14	17.4	-	96.08	2
Maintenance of close relatives	137.64	165.2	217.2	170.9	-	690.94	16
Medical Treatment	3.25	3.62	5.2	18.3	-	30.37	1
Studies Abroad	78.7	114.3	114.4	217.8	-	525.2	12
Others**	146.14	107.2	92.7	108.2	436	890.24	20
Yearly Total	751.34	1001.62	865.2	1020	808.1	4446.26	100

** Include items such as subscription to journals, maintenance of investment abroad, students loan repayments, credit card payments etc.

Challenges & Opportunities :

Liberalised Remittance Scheme (LRS) of RBI introduced in 2004 has thrown open the doors of International Investment opportunity for retail investor in India. However data from 2004 to 2013 shows that the response to this scheme is lukewarm. The reasons for lower level of awareness needs to be studied.

The profile of Investors, who are willing to test the investment opportunities abroad also needs to be studied. It appears that at present only HNI are investing under

this scheme. However awareness amongst common retail Investor is minimal. The reasons behind this to be find out.

Many govt of developed / emerging countries have adopted full convertability on current and capital account. This scheme by RBI is first step towards it as it offers partial convertability. Implications to be studied in view of macro economic environment in India and balance of payment situation.

Developing economies also offers LRS equals in their respective countries. This needs to be compared to Indian version of LRS of RBI. This will be very helpful to have our LRS remodelled on the basis of successful LRS of other developing economy of China, Brazil, Russia etc.

We were having good foreign exchange reserves in 2004. Today imports are increasing at alarming speed and reserves are not favourable. The present limit of 2,00,000 USD, should be ascertained against this. Opening of the sector in exponencial way may put pressure on already weak rupee.

The nos. of investment community interested in investment abroad should be studied with reference to large nos. of such Investors in developed economies. The investors preference need to be analysed in depth.

Statement of the Research Problems:

- Why there is no growth in Investment abroad by Individual Investors during the period of 2004 to 2013 ?
- Which type of profile of Investors are inclined to make investments abroad under this scheme ?
- How we can remodel our LRS in view of other LRS equals adopted by other developing economies ?
- Why very small nos. of retail investors are interested in Investment abroad ?
- To study the effectiveness of LRS from different stakeholders point of view of ie. Investors, Government and Wealth Managers.

Research Hypothesis:

- Awareness of LRS scheme is not lower than other investment schemes among HNIs.
- There is no difference in number of active LRS Investors in metropolitan cities and smaller cities.
- On an average, active Investors do not invest less in LRS as compared to other investment schemes.
- Investors believe that there are more investment opportunities available in India than abroad
- Investors believe that returns on investment abroad are poor as compared to India.
- Investors believe that it is inconvenient to invest abroad.

Literature Review:

The remittance facebook 2011 of World Bank compiled by Dilip Ratha, Sanket Mahapatra and Anil Silwal of Remittance Unit of World bank. This data is quiet exhaustive. However it mainly focuses on

 ISBN: 978-81-910118-7-6

workers remittances and compensation of employees. In India total Inward remittances flow for the year 2009 is 49 Billion USD against outward remittance of 4 Biliion USD. This data needs to be analysed from Investors point of view for investment portfoilio in equity and debts.

The working paper published by Illene Grabel in Oct 2008 of PERI, Univercity of Massachusetts enlightens about importance of private remittances in the financial landscape of many developing countries. In some countries, these flows are the single most important type of International capital inflows. They have also become important source of purchasing power and foreign exchange. The paper draws findings from rapidly growing multidisciplinary study of remittances, identifies what we do not know and what we still need to know about their economic, political and social consequences. He has also mentioned that vast body of literataure in the field of finance and economic development and international capital flow has largely ignored remittances. The study shows that worldwide remittance under private debt / equity has increased substantially from 40 Billion USD in 1990 to 543 Billion USD in 2007. However this study does not list the returns made on investments abroad and their geographical spread.

A paper titled Thailand : Forex Regulations is published by Economic Intelligience Unit on 9th Sept 2004 at New York. It highlights the various policies adopted by Thailand for outward remittances from Investment point of view. It limits the amount that can be used to buy residential property abroad to 5,00,000 USD by local residents. However investment in debt/ equity abroad needs approval from statutory bodies. The impact of such policies needs to be studied from Investor return point of view.

In response to requests from policymakers, compilers, and other data users, the International Monetary Fund (IMF) and the World Bank invited experts in remittances statistics from selected economies and international organizations to identify a set of best practices, and to prepare a compilation guide, for remittances statistics. The first meeting of the group was held in Luxembourg (and thus named the “Luxembourg Group”) in June2006. It identified data sources and compilation methods, and it drafted and reviewed the International Transactions in Remittances: Guide for Compilers and Users (also called Remittances Compilation Guide, or RCG), during 2006–08. The IMF coordinated the preparation and edited the text of the RCG.

The Secretariat for the Luxembourg Group consisted of the IMF, World Bank, and Eurostat. The three meetings of the Luxembourg Group were hosted by Eurostat (June 2006), Deutsche Bundesbank (December 2006), and Banco Central do Brasil (June 2007). The United Nations Statistics Division led the work that resulted in the adoption of improved definitions for major remittance aggregates.

The biggest obstacle to improving data on remittances is the nature of the flows, often involving small transactions by private individuals using a variety of

transaction channels, many of which are informal or personal. The small size of individual transactions means that they often go undetected by typical data source systems, although the aggregate level of transactions may be substantial. As a result, the RCG focuses on the problems of and solutions to obtaining better source data on remittance transactions, but it also summarizes compilation and data dissemination issues. The RCG draws on the Data Quality Assessment Framework (DQAF) for balance of payments statistics to highlight good practices in data compilation and dissemination.

Sampling Design and Data Collection

Primary Data

- Target Investors, 200
- RBI officers,
- Wealth Managers, 25
- Outward Investment Experts : 25

Secondary Data

- RBI Website
- Investment Journals
- Websites of leading exchanges of world and Federal Banks.
- Newspapers and periodicals
- Columns by Investment experts
- FT, Wall Street Journal, ET, Euromoney.

Findings & Recommondation:

There is very less level of awareness amongst Indian investors about LRS. Investors have insecurity feeling about his invested amount abroad. He fears the liquidity problem of his investment amount. Awareness camps on large scale are must.

There are only HNI category of Investors who are interested in exploring this opportunity. Investment under LRS are normally recommended by big Investment Bankers. They only cater to elite customers.

Small time investors is willing to invest in India as there are tax breaks available in India. Such tax breaks are not available for investment abroad. In India we have section 88c under which investment upto Rs. 1 lacs becomes qualified for tax breaks. Govt also encourages investment in House property by offering tax breaks under Income tax act for interest on housing loan.

The returns can be increased for overall portfolio, if part of investment are made under LRS. This can help investor to beat inflation and come out with real positive returns.

There is also risk of currency fluctuations during the period of investment. The upword/downword movement of repective currency plays very dominant role. Thus investor will be required to take into account the risk associated with currency fluctuation. He needs to hedge his portfoilio against currency risk to have smoother returns.

The limit for LRS needs to be continuously monitored in view of foreign exchange reserve of the country. The present limit has to be ascertained against foreign exchange reserve, currency fluctuations, average amount of investment per investor, GDP growth rate of the country etc.

 ISBN: 978-81-910118-7-6

The average investor tends to invest in mainly US and European countries. There is also need to come out with list of most favoured investment destination by credit rating agencies. The negative list of countries also needs to be published on regular basis to protect investors from volatility and risk associated with these country. There is need to have full time regulator as RBI is loaded with tons of work load and for the healthy growth of this segment full time regulator is must on the basis of Telecom and other important sector.

The big long term money lies in Pension sectors. The large pension funds can be given opportunity to invest under LRS for the common investors. This will ensure level playing field with respective to large MNC Investment bankers. The large potencial market will also help the MNC giving world class services and transperancy for Indian small Investor.

Conclusion:

The present LRS of RBI is not adequate for healthy growth of the sector. The awareness level amongst small investors is minimal. Investors tend to invest pre dominantly in Indian market, in spite of opportunity to divercify his portfiolio across the globe and maximise his returns. The major factor determining present limit under LRS is consideration of foreign exhange reserves. The long term views are must for this. The currency risk is also associated with investments in abroad. It has been observed that Indian investors tends to invest in fixed security bank deposits owing to his safety concern. He has to balance his portfoilio by adding flare of outbound investment and generating returns which can beat inflation.

Financial freedom is need of time and opportunity to small investor to participate in the world growth story is must. All the stakeholders ie. Government, Regulator, Investor, Intermediary and Developed economies of the world needs to help in formulating conducive policies. This will help for encouraging small investors to invest abroad and reap the benefits of global economy. There is need to have full time regulator on the basis of TRAI to evolve this segment.

Scope / Limitation of the Studies

- Geographical spread will be Pune / Mumbai area
- There are strong preferences for certain products in specific cities. Mutual funds and gold are preferred by Delhi, Stocks are favoured by Mumbai, Chennai wants real estate and Bangalore is into debt.
- The investment preference are linked to present market/economic scenario in India and abroad.
- The exact amount of returns generated for investments abroad may not be possible to arrive at due to secrecy of the data.

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ISBN: 978-81-910118-7-6

Economic Down Turn: Challenges and Emerging Strategies of Luxuryhotels in Managing Business of 'Key Accounts'

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Background:

At Present the Luxury Hotel segment of Hospitality industry in India is going through a turmoil. If performance reports of the hotels are anything to go by, the Indian hospitality industry is going through its toughest period ever. The industry performance has slumped to it's lowest-ever in the first half of 2013 and continued in the same mode in the later Part of the year. Key performance metrics have reported negative growth in the industry. The results are well below the regional performance metrics of Asia Pacific

Negligible growth in the manufacturing and allied sectors, less-than-expected growth in inbound travel, devaluation of the Indian rupee against the US dollar, and room supply overshooting demand; nothing seems to be favoring the Indian luxury hotel industry.

Most hotels in the country are running half empty, as the GDP growth slips to 5% levels this fiscal year, says the Federation of Hotel and Restaurant Associations of India (FHRAI). In a preliminary report, the hoteliers' body has found that average hotel occupancy in 2012-13 dropped to the lowest in a decade at 58.3% and average room rates fell to Rs 6,214, the lowest in six years

The reasons for the pain are palpable. Demand from business and leisure travelers, both domestic and international, is down. Dealing a double whammy, supply of rooms has increased dramatically over the past few years, and more inventories are adding up. In 2012-13 alone, close to 12,782 new rooms were added, taking the total supply of branded hotel rooms up to 96,000. India is expected to add another 54,000 hotel rooms over the next three to four years, says consultant HVS.

Many of these hotels were conceived at the height of the economic boom, when a number of investors entered the business out of exuberance, but without conducting proper due diligence. The result: many wrong categories of hotels sprung up at the wrong locations.

Tough macro-economic conditions, which stifled business and leisure travel, compounded by huge supply additions took a hard toll on the premium hotels (5-star and 5-star deluxe) segment in 2012-13. More importantly, the current fiscal will remain equally dire for the industry, and no major positive headwinds appear to be on the horizon

 ISBN: 978-81-910118-7-6

Objectives of this Research Paper:

1. The find out to what level the Present economic conditions times affected the key Account Management initiatives, practices and Objectives of the Luxury Hotels
2. To find out which are the areas of business most affected { Room Bookings, payment collections, new accounts creation and converting them into key account in long term }
3. To find out if these luxury Hotels are prepared to handle this difficult business situation
4. To study what measures these Hotels have taken to face this difficult with good success
5. What are special challenges Luxury Hotels with Global operations
6. What are the short term and long term options available
7. What are the Local or geographical challenges of these Hotels

Pressure on Pricing: Today the Key Accounts are more informed about the options available in the market. The competition hotels are alsoapproaching each other's key accounts with PenetrativeStrategies. In case of Fivestar segments the competitors are also 'Brand' hotels and this becomes a challenge for every hotel since competitors are also equallygood and may be better in foot print locally or even globally.

Many key Customers of Five star hotels start the negotiation process in July / August for next years contract and continue this for three or four months till they get the best bargain. This is for fixing the prices and Terms / conditions etc.Today Many Luxury hotels are being asked pricing lower than last year. This is a difficult situations when the costs of all the inputs are growing up and this actually calls for upward pricing of products and services.

Mid-Year Renegotiations: As explained above due to worsening of economic conditions from beginning of the year in the later part many of the key accounts of these hotels are affected in their business, sales, profits etc. . They are forced to have Cost Reduction exercise and as a part of this exercise, Mid-year Renegotiations have become common. On one side there is a pressure of reducing the prices, and the other side there is no Guarantee of business volume increase. The key customers are always sort of threatening of Finding Options to existing suppliers as a bargaining tool

Geographical considerations: Most of the Industrial or Business cities in India are getting new luxury hotels. Many hotel Groups are starting new properties as a part of their expansion plan and also as they see business opportunities there in these existing or new Industrial / business areas. Even an established Luxury hotel having animportant key account placed in a long distance business / industrial area is worried of losing the account to their competitor hotel since it is situated close by from the key account . Thus 'convenience'and 'time' of travel is a new dimension and a challenge to retain existing key accounts.

Excess Room capacities: India's hotel industry is grappling with the problem of having too much.Optimistic forecasts

for increased demand sparked a blaze of investment in recent years. But the increase in supply did not match an increase in demand. In fact, decreasing demand because of economic factors and competition is making the situation all the more biting Many of the Luxury hotels are running at much less capacities. The main reason is the demand from Business and Leisure, both domestic and International travelers is down. On the other side the supply of the rooms have increased dramaticallyadding to Inventories. Many companies went to expansion mode few years back during the healthy condition of economy. Many Non Hospitality Houses also entered this business looking at great potentials. . In 2012-13 alone, close to 12,782 new rooms were added, taking the total supply of branded hotel rooms up to 96,000. India is expected to add another 54,000 hotel rooms over the next three to four years,

The Threat of Substitution: Many of the important large and Medium Key Accounts are trying option of 'Service Apartments' for their frequently travelling employee and especially those who need to stay for work for a longer period. . Many times the saving is 25 – 40 p.c. compared to the prevailing prices of hotels and thus results into great savings. The value additions offered by some of the professional service apartment providers is offering good competition to Luxury Hotels. They result in saving of 25-40% as compared to the prevailing hotel prices and thus an economical option. The concept of service apartments is immensely popular in the West, offered to professionals visiting the city for a short period, stretching to a maximum of six months.

Corporates are entering into long term agreements with serviced apartment? Operators for maintaining a fixed number of rooms for its employees through the year. Such companies are realizing cost savings in multiple ways

Emerging Strategies to Sustain and Grow business in the Key Account Business Plan of Luxury Hotels

Key Accounts from Diversified Industries: The Luxury hotels have tried to have Key Accounts from various industries to distribute the'eggs into many Baskets'. Presently the Automobile OR General engineering industry is bleeding and not in good shape. Having Majority of key accounts from this industry will put the hotel into great difficulty. The professional Luxury hotels started working and keep working on the strategy of having Key accounts from various Industries. Examples like IT, BPO's, IT R@D, Project companies, F@B companies, Oil and Gas related companies, Export oriented Units etc.. This can leverage their KAM {KeyAccount Management Plan} well in totality.

Special Attention to Global key Accounts: Many of the Luxury hotels are like MNC's having Global operations. These Indian Luxury hotels derive special focus on the Key Accounts of their overseas sister companies having presence in India. Rationalizing Special prices, services and other business terms is carried out to provide better local services.

Offering New 'Values Prepositions' and 'special services' to Key Accounts: The Luxury hotels are offering special 'Value

 ISBN: 978-81-910118-7-6

Added Services' to their Key Accounts. Example two way airport drop, few hours of Wi-Fi free, concessional laundry services etc. For frequently travelling Business Employees, these are important direct and indirect benefits.

The other offering like the'Loyalty Programs'and 'Bonus points': The Frequently visiting Guests are offered Loyalty points depending on their Frequency. These points can be redeemed to get some benefits after particular interval or after accumulation of certain Points

'New Account Acquisition' programs andthen converting these accounts into Key Accounts: Most of the Luxury hotels working on this aspect of business development with top and consistent priority. The sales and Marketing teams spend lot of time and efforts to generate information about new projects, business establishments expected to come in the geographical Region. The Hotels start approaching these now companies right there and well in time to be the 'preferred supplier' of services. Once the opportunity is received {even a small business opportunity}, all the plans and implementation is done with full attention to make this as a new Key account. Obliviously this depends largely on the 'Potential' of business from this customer

BuildingLocalizationApproach for building Key Accountsfoot print: Many Luxury Hotels having Global operations are changing their Products and Servicepackages looking at Indian conditions. Many Reputed hotels have initiated Mid-sized and Mid valued Packaged products and services, Budget brands etc. which they may not be offering in west. They realized that unless they do so, they will not be able to explore large potential in India due to preferences and priorities by Indian customers

Innovative services and value additions for Existing and potential Key Accounts. As it is always said that there is no limit to innovations. A professionally hotel should us new innovations and implement. To counter the competition this is very important and necessary. The common word used in Management is 'Exclusive Innovations'

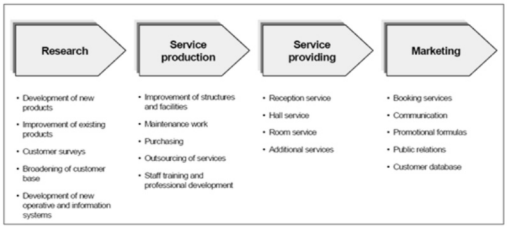
Closing a gap between the Key Account Expectations and Management priorities. It is very expensive and time consuming to find a new account. On top of it there is no guarantee of its being with you for a long time. Then it is must that the existing Key Accounts must be built to maximum. These accounts will have their expectations about the products and services. These sometimes may not be in line with the management practices of the hotel. A sincere efforts should be made to close this gap best possible. Honest Interactions with your key accounts and building confidence on each other will help to do so

In the Luxury hotel Business, earning the customer, maintaining it and building it further is veryimportant. There are very few cases like 'Project Business' in engineering company business. Luxury hotel business s highly service oriented. Generating more accounts and having larger no of key accounts is desirable and Must

The flow chart given below is the one of the best series of actions the professionally

managed Luxury hotels should take to have more and more Key Accounts.

This is the process of New Account Acquisition and then converting these accounts into 'Key Accounts'.



Source:Stagnant Growth: Strategic Analysis of a Luxury Hotel Brand – IIMB Management review

Recommendations:

Following actions and business practices are recommended to immunize the effect of the turbulence times on KAM

Cost Benefit analysis of different products, promotion, distribution at every stage when offered to Key Accounts

A focused communication plan to convey to the right audience at Key accounts

Duel focus on short term wins and Long term solutions to convert new accounts in KAM.

Periodical Health checkup of the progress …. And it is all about Learning and adopting

Engagement of Senior Management team members to work towards mutually agreeable solutions.

Special focus on Customer relations i.e. customer's officials at all level

The customer's loyalty towards the supplier need to be re looked in such conditions

It is important to determine, review and take steps about 'Account attractiveness'.

Risk Analysis of every measure taken in Key accounts of the Hotels is required in regular time period.

Brand Building and management {uniqueness, differentiation and market insight} with key Account is very important.

Conclusions:

The Economic Downturn has affected the business and business potential of most of the Hotels, Key account Management is an area which is affected maximum. All are re visiting their policies and strategies to handle Key Accounts so that the negative effect is minimized and a meaningful out comes received. But is important that the Key Accounts are also considering importance of having these long term key suppliers with them

Many companies are planning and preparing themselves for facing the difficult times well in advance. They keep on monitoring the progress and take corrective decisions. It is a proved fact that the better Customer Relations at all level, Engagement of Senior Management will help the Luxury hotels to face the challenges in KAM effectively. Many Hotels are now working extra miles to build the buyer seller relationship to have a long term commitment and protection during such turbulent times. They also give special attention on Role,

 ISBN: 978-81-910118-7-6

skills, knowledge, and qualities of Key Account Managers. There is great level of motivation and rewards for performing key account managers. These companies follow systematic approach to measure the effectiveness of their KAM practices using Balanced Score Cads technique.

There are many companies having many key accounts, divide their status with their Key Accounts with following stages.

Pre-KAM …..Early-KAM….Mid-KAM…….Partnership KAM……. Synergistic KAM…….Uncoupling KAM.

Their strategic plans to face the challenging situation with Key Account Management is based on their analysis of above stages. It is important to note that the Luxury hotels has enough potential to work on diversified industry Key customers as to leverage their overall performance.

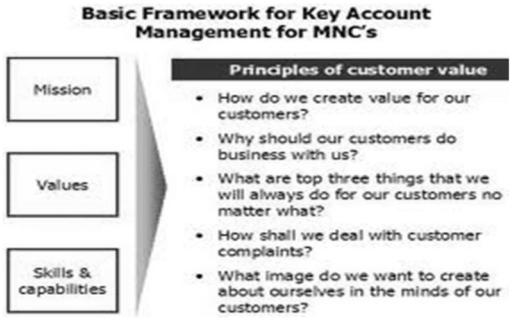
Limitations of the study:

1. The study was made with taking few Luxury hotels as sample from Pune Region. It will have to be seen if these conclusions are applicable to other geographical regions as well
2. The study is related to the present condition of economy. If it gets a better shape then there will be lot of concessions from key Accounts on the terms and conditions of making business with Luxury hotels.
3. The study mainly talks changes and issues of Luxury Hotels only. It may not be directly applicable to budget hotels as well as serviceapartments.
4. Majority of the study is made from the point of Hotels. We have contacted just couple of customers only. This study describes issues and solutions from the point of view of Luxury hotels

Scope of study:

1. The study is useful for those hotels who are in the beginning stage of KAM or thinking to Initiate the KAM
2. The study can be applied to all types of Key Customers of Luxury Hotels
3. The study can help us to anticipate some difficult challenges even for those hotels who practice KAM
4. The study can used for entire product or service lines or even for any vertical within.

KAM for Multi National Company Hotels: In India most of the large size and Well EstablishedLuxuryHotels are part of MNC's operating globally. They change many of their Global policies and operating guidelines for Indian Conditions. The below Chart Can provide the Guideline for a new KAM practice as a Guideline to follow OR even for the existing one as a Guideline to make changes if required


Basic Framework for Key Account Management for MNC's
Mission
Values
Skills & capabilities
Principles of customer value
How do we create value for our customers?
Why should our customers do business with us?
What are top three things that we will always do for our customers no matter what?
How shall we deal with customer complaints?
What image do we want to create about ourselves in the minds of our customers?

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ISBN: 978-81-910118-7-6

Corporate Governance Practices in Banking Sector: An Experience with Pune Urban Co-operative Bank Ltd.

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Abstract:

Corporate Governance is concerned with the systems and processes for ensuring proper accountability, probity and openness in the conduct of an organization's business. Thus, it is the process under which the organizations try to hold the balance between economic and social goals and between individual and communal goals. The basic aim of Corporate Governance is to align as nearly as possible the interests of individuals, corporations and society. Banks have an overwhelmingly dominant position in developing the economy s financial system, and are extremely important engines of growth. Despite the differences between co-operative banks in the different countries, all networks share one common and defining feature – member ownership. The cooperative banks are effectively owned and controlled by their local customers through the membership concept. Corporate governance in banks has assumed importance in India post-1991 reforms because competition compelled banks to improve their performance.Due to these core values and corporate governance rules, cooperative banks were not at the root of the crisis and have shown to be more resilient during the crisis. With core values and corporate governance model of cooperative banks in mind, the importance of corporate governance is much greater than is considered at present.

This paper reviews the existing codes of Corporate Governance (CG) in India. It analyzes the CG structures and practices in Pune Urban Co-operative Bank Ltd. by using a case study methodology. It uses secondary data for analyzing the adaptability of CG codes in the Indian context. The data were collected through various published and unpublished reports and websites. The paper reveals that India has a good CG mechanism and disclosure practices on par with world counterpart.

Key Words: *Corporate Governance, banks, investors confidence, performance etc.*

Introduction:

Cooperative Banks are characterized by relatively lower risks, lower volatility and more stable returns. Cooperative banks are active in retail banking. Their focus on retail banking is mirrored in the type and number of customer they serve. The cooperative banks in turn own and control the supporting infrastructure, regardless of the number of tiers, their roles and the authority that has been delegated to them. The member ownership concept is not only central to the cooperative ideology but is also a unique aspect1. The statutory aim of cooperative banks is explicitly defined as promoting economic interest of its members We would

 ISBN: 978-81-910118-7-6

therefore like to remind that due to these core values and corporate governance rules, cooperative banks were not at the root of the crisis and have shown to be more resilient during the crisis.. With core values and corporate governance model of cooperative banks in mind, the importance of corporate governance is much greater than is considered at present.

The general feeling of regulators and supervisors is that corporate governance did not directly cause the crisis. It is considered generally that the lack of effective control mechanisms only contributed to a significant extent to risk taking on part of financial institutions3 and can contribute to bank failures4. However, the governance in certain 'too big to fail' institutions were either too large or too complex for a CEO or a Board of Directors to manage or monitor. This led to certain activities in the different bank governance structures that can explain the origin of the crisis. This point of view is also underlined in a study of the OECD in 2009, which stated that"the financial turmoil has revealed severe shortcomings in practices both in internal management and in the role of the Board in overseeing risk management system at a number of bank". In addition, in a study conducted by the World bank in March 2010 it is mentioned that "the central irony of the governance failures that became apparent in the crisis is that many took place in some of the most sophisticated banks operating in the most developed governance environments in the world".Therefore, it is of great importance to carefully reflect on specific features of differentgovernance models and their direct effects on the sound operation of banks and financialstability. Banks in India are the most significant source of finance for a majority of firms in Indian industry. Banks are also the channels through which the country's savings are collected and used for investments. India has recently liberalized its banking system through privatization, disinvestments and has reduced the role of economic regulation and consequently managers of banks have obtained greater autonomy and freedom with regard to running of banks. This would necessitate their observing best corporate practices to regain the investors' confidence now that the government authority does not protect them anymore.

Objective of the study:

1. To study the role of corporate governance in Cooperative bank in general with special reference to Pune Urban Co-operative Bank Ltd. Pune.
2. To evaluate bank performance relating to financial statement analysis

Research Methodology:

The research paper is conceptual in nature, to explain the role of corporate governance in co-operative bank. The data was collected through the secondary sources like: research articles, books Magazines etc. and annual reports for the period 2011-13. Tabular analysis is followed.

Limitations of the Research:

The limitation of the research is the lack of primary data collection due to difficulty in getting appointment with senior bank

official in banking industry. The practical applications as related to the corporate governance adopted by the banks are not learned.

Why corporate governance in Indian banks:

The system of corporate governance is important for banks in India because, majority of the banks are in public sector, where they are not only competing with one another but with other players in the banking system as well as in financial services system including Financial Institutions, Mutual Funds and otherintermediaries, in a new environment of liberalization and globalization. Further, with restrictive support available from the Govt. for further capitalization of banks, many banks may have to go for public issues, leading to transformation of ownership.

Good corporate governance practices

Each member of the Board of Directors of the Bank should adhere to the following so as to ensure compliance with good Corporate Governance practices.

"Dos

i. Attend Board meetings regularly and participate in the deliberations and discussions effectively.

ii. Study the Board papers thoroughly and enquire about follow-up reports on definite time schedule.

iii. Involve actively in the matter of formulation of general policies.

iv. Be familiar with the broad objectives of the Bank and the policies laid down by the Government and the various laws and legislations.

v. Ensure confidentiality of the Bank's agenda papers, notes and Minutes.

"Don'ts

i. Do not interfere in the day to day functioning of the bank. (This stipulation does not apply to the Chairman and Managing Director and Executive / Whole Time Director)

ii. Do not reveal any information relating to any constituent of the Bank to anyone.

iii. Do not display the logo / distinctive design of the Bank on their personal visiting cards / letter heads. (This does not prevent the Chairman and Managing Director and Executive / Whole Time Director from using DO Letterheads or visiting cards with BOI's logo thereon).

iv. Do not sponsor any proposal relating to loans, investments, buildings or sites for Bank's premises, enlistment or empanelment of contractors, architects, auditors, doctors, lawyers and other professionals, etc.

v. Do not do anything, which will interfere with and / or be subversive of maintenance of discipline, good conduct and integrity of the staff.

Pune Urban Co-operative Bank Ltd.

Pune urban co- operative bank ltd is founded in 16th July, 1924, by late. Shivajirao dhamdhere,andis one of the fastest growing co-operative Banks in the Pune district, it has

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its 11th branches in the Pune itself and now trying to open new 12th branch in the area of KHED-SHIVAPUR, PUNE. Bank has its own special identity among various co-op banks in the Pune district, due to transparency in the work and management, development of bank and co-ordination of employees. State government of Maharashtra's cooperative ministry has given "A" grade to the Pune urban co-operative banks Ltd. RBI is also satisfied with bank performance, Excellency in work and about Rules and norms of RBI which are following PUB.Now a days there is cut throat competition in the banking sector, there are lots of expectations of customers so to fulfilling customers' expectations, PUB is trying to adopt latest technology to give better services to them. Bank is also launching ATM facility and going towards CORE BANKING.

Financial Statement Analysis of Pune Urban Co-operative Bank Ltd.

(2011 to 2013)

Particulars	31/03/2011	31/03/2012	31/03/2013
Share Capital	543.49	562.75	585.97
Deposits	42369.38	45193.34	52899.23
Loan	25348.57	28202.93	33047.09
Investments	23695.55	24140.76	28575.52
Total Business	67717.95	73396.27	85946.32
C.D. Ratio	59.83	62.41	61.47
Working Capital	52151.17	56125.22	64927.83
Net Profit	852.76	1026.19	1085.75
Gross NPA	528.42	454.03	445.66
% Gross NPA with Loan	2.08	1.61	1.35
% Net NPA	0.00	0.00	0.00
CRAR	21.44	21.45	21.34
Total Branches	11	12	14

(Source: annual report of PUB)

The number of Shareholders has increased from 14587 to 15180. During the year 593 new members were admitted whereas membership of 180 members was discontinued due to resignation, death etc. From total number of 15180 members on 31.03.2013, 14837 are individual and 343 are institutional members.At the end of the year out of 7781 nominal members 1276 are the borrower nominal members and its percentage to regular members as on that date is 8.40%

Paid Up Share Capital

The paid up share capital of the bank increased from Rs.794.95 lakhs as on 31.03.2012 to Rs.1004.03 lakhs as on 31.03.2013 registering growth of 26.30% over the previous year.

Reserves

The reserves and other funds have increased from Rs.4000.81 lakhs as on 31.03.2012 to Rs.4505.96 lakhs as on 31.03.2013. The overall additional contribution to reserves and other funds was to the order of Rs 505.15 lakhs.

Deposits

Bank's deposit as on 31.03.2012is Rs.310.60 crores. During the current financial year it is increased by Rs.72.83 crores and the growth rate is 23.45%. The percentage of Current Account deposits is 9.42%,

savings is 24.81% and fixed deposits are 65.77%. During this financial year interest paid on deposits is Rs.2395.86 lakhs, thus the borrowing rate of the year is 7.08%.

Loans and Advances

As per prevailing norms it is necessary for the bank to keep in between its C.D. ratio 60% to 70%. Bank's C.D. ratio as on 31.03.2012 is 58.91%.From the disbursement of loans bank had earned Rs.1944.43 lakhs by way of interest in the year 20011-12. Bank offered 13% rate of interest for vehicle and 13% rate of interest for housing loans. For regular repayment i.e. repayment without default 1.50% rebate was given in the year 2011-12. The amount of rebate was Rs. 46.35 lakhs among 885 borrowers in the last year. It is requested to all borrower members to get the maximum benefit of rebate and keep your bank's health good.

Security wise Loan analysis as on 31.03.2013 is as follows (Amount in Lakhs)

Sr. No.	Loan type and Security	No.of Borro-wers	Outstand-ing	%to out-standing
A	Secured against			
A.1	Stock and book debts	293	3014.77	12.67%
A.2	Immovable property	665	4886.58	20.54%
A.3	Plant and machinery	63	324.23	1.36%
A.4	Transport operator	935	2990.86	12.57%
A.5	Gold ornaments	1712	1908.46	8.02%
A.6	Govt. Bonds	3	5.09	0.02%
A.7	Fixed Deposits	795	1900.1	7.99%
A.8	Other Securities	1766	8752.85	36.81%
B	Unsecured			
B.1	Surety Loans	11	4.91	0.02%
	TOTAL	6243	23787.85	100.00%

(Source- annual report PUB)

Investments

Investment of the bank as on 31.03.2011 was Rs.148.87 crores; it is Rs.165.50 crores as on 31.03.2012. There is growth of Rs. 16.63 crores in investment. All these investments are made within the stipulated norms of Reserve Bank of India. During the year 2011-12 bank has earned Rs.1296.04 lakhs by way of interest on investment. The average interest rate of the investment is 8.61%.

Overdues

Bank's overdue percentage is brought down to 1.45% as on 31.03.2012 and have achieved 0% net NPA target consecutively 7th time. Bank have received a trophy for the 7th consecutive year from PUNE ZILHA NAGARI SAHAKARI BANK'S ASSOCIATION, PUNE for achieving the 0% NPA.

Income and Expenditure

During the year 2011-12 bank has earned income Rs.33.49 crores. Out of total income Rs.1944.43 lakhs by way of interest on loans and advances, Rs.1296.04 lakhs by way of interest on investment and Rs.108.97 lakhs by way of other income.From the total income of Rs. 33.49 corers deducting all

 ISBN: 978-81-910118-7-6

expenses, had profit of Rs. 2.70 crores. The ratio of profit to the total income is 8.06% and that of to the working capital 0.74%.

Audit

As authorized by the last Annual General Meeting Board of Directors had appointed M/s GundGawade& Company C.A. as Concurrent Auditors of our Bank for the financial year 2011-12. They have completed their work in time and submitted their audit report which is put before Annual General Meeting for information.In the current year i.e. 2011-12 Co-operative Department has appointed M/s KhareDeshmukh& Co. a firm of Chartered Accountants as Statutory Auditors of this bank. They hadcompleted their audit and had submitted their audit report, which is put up before Annual General Meeting for information.

Bank awarded "A" audit class to your bank for financial year 2011-12.

Management

Board of Directors continued to guide and monitor functioning and general performance of bank. The matters attended by the board included planning for all round business development of the bank, laying down policies, sanctioning of loans, monitoring recoveries etc. The sub-committees of the Board viz. Management committee, Loans and Recovery Committee, Investment Committee, Audit Committee and IT Committee efficiently discharged the functions of monitoring and supervising the working of your bank. In the year 2011-12, 29 meetings of Board of Directors, 40 meetings of Loan and Loan Recovery committee, 22 meetings of Management committee, 2 meetings of Investment committee, 2 meetings of Audit committee, 10 meetings of IT committee, total 105 meetings and 579 meetings of Branch Committee were held for conducting the business of the Bank. On 31.03.2012 the total number of employees of the bank is 105 and 29 trainee employees. Bank regularly arranged the staff training program through PUNE ZILHA NAGARI SAHAKARI BANK'S ASSOCIATION, PUNE.

Achivements and Speciality of Year 2011-12

Bank has achieved core banking step and expected to start A.T.M. facility in nearest future, shareholders / account holders and customers of the bank can get the facility to withdraw amount throughout India.

5. Corporate Governance & Disclosure Practices of Pune Urban Co-operative Bank ltd. Pune.

Basis of Comparison	Pune Urban Co-operative Bank
Philosophy on Code of Governance	Brief Statement of Banks Philosophy on Code of Governance
	Proper Disclosure
	Board of Directors
Nature of Board	Proper Disclosure
Composition of the Board of Director	Proper Disclosure
Chairmen of the Board	Proper Disclosure
Attendance of Each Director at the BOD Meeting	Proper Disclosure
Number of BOD Meetings Held& Dates	Proper Disclosure
	Audit Committee
Composition & Name of the Chairperson	Proper Disclosure

Meeting & Attendance during the year	No proper disclosure regarding the dates of the meeting held
Frequency of meetings and Forum	Proper Disclosure, Two Months
Audit Committee of the Board	Proper Disclosure
Powers of the Audit Committee	Proper Disclosure
Functions of Audit Committee	Proper Disclosure
	Remuneration Committee of the Board
Attendance During the year	One meeting held, proper disclosure
Remuneration Policy	Proper Disclosure & Transparent Policy
Composition, Quorum of the remuneration	No Proper disclosure
Disclosure of Remuneration Package	Proper Disclosure & Transparent Policy
Risk Policy & Monitoring Committee	Proper Disclosure,
Nomination Committee	Proper Disclosure,
Fraud Monitoring Committee	Proper Disclosure,
	Shareholders Committee
Name & Designation of the Compliance officer	Proper Disclosure
Number of share transfer pending	Proper Disclosure
	General Body Meetings
Location & time of Last Three AGMs	Proper Disclosure
Were special resolution passed?	Proper Disclosure
Details of Voting system	Proper Disclosure: only physical voting so no need to postal ballot system
	Disclosures
	General Shareholders Information
AGM Date, Time, and Venue	Proper Disclosure
Financial Calendar	Proper Disclosure
Dividend payment date	Proper Disclosure
Address for correspondence	Proper Disclosure

Findings:

Pune urban bank Ltd. is getting higher returns in on assets. There is decreasing trend of interest paid on deposits to total assets ratio so it indicates that there is profit to the bank in the year 2011, 2012, and 2013 as compare to 2010 Bank has good C/D ratio. Interest received on loan, advances to total income ratio shows that in the year 2013 there was high income from distributing the loans to the customers, high income received from consumer shows high profitability of the bank. Per Employee Business is also increasing, productivity is high& Net NPA is 0%.Overall financial position of the PUNE URBAN CO-OP. BANK LTD is normal but it is required to be improved from the point of view of profitability. Bank should maintain their profitability with increasing trend with high proportion of amount then customers again can attract to the bank. In the year 2013 bank is performing better as compare to previous years.

Corporate governance in its wider connotation basically covers a range of issues such as protection of shareholders' rights, enhancing shareholders' value, Board issues including its composition and role, disclosure requirements, integrity of accounting practices, the control systems, in particular internal control systems. Corporate governance especially in the co-operative sector has come into sharp focus because more and more co-

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operative banks in India, both in urban and rural areas, have experienced grave problems in recent times which has in a way threatened the profile and identity of the entire co-operative system. These problems include mismanagement, financial impropriety, poor investment decisions and the growing distance between members and their co-operative society. Such practices lead to maximum defaults and growing Non Performing Assets (NPAs). However, Pune Urban Co-operative Bank ltd. Pune has remained an exception to all such problems.

Conclusion:

The emergence of corporate governance has its own history in different parts of the world. In the present global environment, where economies are integrated with global market environment, it is imperative to develop sound system of Corporate Governance. Bank's stakeholders remained firmly positive on the Bank's business and financial performance. Pune Urban co-operativeBank too met the stakeholders' expectations in terms of performance, transparency; corporate governance and integrity in guidance during the last couple of years.

In spite of limitation of the study, the secondary sources of data help us to pinpoint the effectiveness of corporate governance in banks. Thus Corporate Governance Practices become very important for increasing trust & confidence among stake holders in Banks.

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Analysis of Corporate Restructure: Merger & Acquisition Case of HDFC Bank and CBoP (Centurion Bank of Punjab)

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Abstract:

Corporate Restructure happens only at that time when ownership changes in the company occurs. Here the acquirer company is HDFC Bank and the target company is Centurion Bank of Punjab. The HDFC Bank-Centurion Bank merger was agreed upon by both the banks in principle. This had created the largest private sector financial institution in terms of branch network at that point of time. The share-swap deal, worth over Rs. 10,000 cr, was worked around the current market price of Rs. 57 a share of CBoP.The creation of India's 7th largest bank, just behind public giants like Bank of Baroda, Bank of India. Data and other both bank's related information's have been used in and around the date of merger. This Research Paper on Merger Case study analysis is an attempt to understand the applications of mergers related specific formulae in the Indian companies context and observe the synergies made available to both Acquirer and Target companies which is very important criteria in the corporate restructure analysis case.

Key Words: *Corporate Restructure, Mergers, Acquisitions, Bootstrapping, Considerations, Swap Ratio, Synergies, Market Value Price Exchange Ratio.*

Introduction:

Some Very Briefing about HDFC Bank - Promoted in 1995 by Housing Development Finance Corporation (HDFC), India's leading housing finance company, HDFC Bank is one of India's premier banks providing a wide range of financial products and services to its over 11 million customers across over three hundred cities using multiple distribution channels including a pan-India network of branches, ATMs, phone banking, net banking and mobile banking. Within a relatively short span of time, the bank has emerged as a leading player in retail banking, wholesale banking, and treasury operations, its three principal business segments. The bank's competitive strength clearly lies in the use of technology and the ability to deliver world-class service with rapid response time. Over the last 13 years, the bank has successfully gained market share in its target customer franchises while maintaining healthy profitability and asset quality. As on December 31, 2007, the Bank had a network of 754 branches and 1,906 ATMs in 327 cities. For the quarter ended December 31, 2007, the bank reported a net profit of Rs. 4.3 billion, up45.2%, over the corresponding quarter of previous year. Total deposits were Rs. 993.9 billion, up48.9% over the corresponding quarter of previous year. Total balance sheet size too grew by46.7% to Rs.1,314.4 billion.

 ISBN: 978-81-910118-7-6

Some Very Briefing about CBoP: Centurion Bank of Punjab is one of the leading new generation private sector banks in India. The bank serves individual consumers, small and medium businesses and large corporations with a full range of financial products and services for investing, lending and advice on financial planning. The bank offers its customers an array of wealth management products such as mutual funds, life and general insurance and has established a leadership 'position'. The bank is also a strong player in foreign exchange services, personal loans, mortgages and agricultural loans. Additionally the bank offers a full suite of NRI banking products to overseas Indians. On August 29, 2007, Lord Krishna Bank (LKB) merged with Centurion Bank of Punjab, post obtaining all requisite statutory and regulatory approvals. This merger has further strengthened the geographical reach of the Bank in major towns and cities across the country, especially in the State of Kerala, in addition to its existing dominance in the northern part of the country. Centurion Bank of Punjab now operates on a strong nationwide franchise of 394 branches and 452ATMs in 180 locations across the country, supported by employee base of over 7,500 employees. In addition to being listed on the major Indian stock exchanges, the Bank's shares are also listed on the Luxembourg Stock Exchange.

Research Methodology:

In the present research paper; focus is on examining the corporate restructuring decisions involving mergers and acquisitions : its application and strategy and to gain an insight in to the application of mergers and acquisitions related specific financial formulae as well as analyzing various financial, analytical and other application tools. Initially, analysis various annual reports and financial reports of selected companies was done to understand the true relevance of corporate restructuring decision making and its usefulness for business growth and sustainability. - Secondary Data- Extensive use of secondary data were conducted by analyzing the annual, financial and non-financial reports of the companies included in the samples. To study and to evaluate the reliability of information included in the annual reports of mergers and acquisitions and in depth study and analysis of financial decisional making methodology was critically examined. Secondary data was very useful in finding out the various parameters by which mergers and acquisitions strategies are being measured and analyzed. Thus, the main focus of this study was based on the understanding of perception of practitioners' in the areas like management, inventory analysis, system operations, costing and budgeting and stakeholders relationship.

Review of Literature:

Review of literature reveals that Mergers in India appear to be primarily guided by the motives of increasing economies of scale and efficiency from the unviable levels pre-reform. Mergers and Acquisitions in India are at an early stage and some of the research findings from literature also reveals that merger wealth

gains have yet to be conclusively proved in India at research point of view. Evrim (2009), brand acquisitions and disposals are key strategic marketing decisions and often the largest single marketinginvestments that firms make. Yet little is known about the performance effects of such decisions. This studyexamines stock market reactions to brand acquisition and disposal announcements in 31 consumer industries. The results reveal that returns to such announcements depend crucially on three complementary firm assets— marketing capabilities, channel relationships, and brand portfolios—but that these effects may not be symmetric across brand acquisitions and disposals. Nina (2011), the findings of the study have various managerial implications. The over activityin Mergers and Acquisition by companies from highly competitive countries might imply some risks for their managers and shareholders: and overvaluation of targets. The main objective of the present study is to assess the wealth effectsarising to acquiring and acquired companies' shareholders during 2005-20011 in the U.S. stock market Michael, Neil and Lopo (2011), investigates in their the relationship between firms' locations and their corporatefinance decisions and to develop a model which is being developed to identify the locate the areas which can increase an industry's clusters and increases opportunities to make acquisitions, and to facilitate those acquisitions, firmswithin clusters maintain more financial slack. Consistent with our model we find thatfirms located within industry clusters make more acquisitions. Almazan, Adolfo, Titman and Vahap (2011), research examines whether, and how, leveraged buyouts from the most recent wave of public to private transactions create value. While earlier literature focuses almost entirely on buyouts from 1 998to 2011, largely consisting of MBOs, we show that the deals completed in the most recent peak of activity differ in a number of important respects. For a sample of 192 buyouts of over $200 million completed between 2001 and 2011, revealed that these deals are somewhat more conservatively priced and less highly levered than their predecessors from the 1990s, but that the deals still impose substantial default risk on the firms. Francesco (2012), Subeniotis, Ioannis, and Markos (2011), this research study also identified the employment effects indicators of mergers and acquisitions inthe manufacturing, financial and service sectors of the US economy.Nevertheless, even though this market for corporate control does not appear to be playing a significant role in Indian M&As, its importance is increasing as the number of M&As between firms belonging to different promoter-owned groups is on the rise. Domestic acquisitions by foreign firms may also lead to a more robust and competitive market for corporate control. M&As involving bidder and target firm combinations, each belonging to different promoter-owned groups, will probably lead to the perception in the stock market of better bidder firm management replacing inefficient or complementing less efficient target firm managers. These might also lead to expectations of better future prospects for the combined firm.

Thus, the above discussed review of literature on Mergers and Acquisition has helped us to understand the fundamental

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basis for Corporate Restructuring but still it is not clear whether mergers in India are perceived favourably by the stock market and to stakeholders. Thus, a more study of this type is an exploratory nature is warranted and research gap in the areas of Merger and Acquisition and Corporate Control, Corporate performance, Financing Compositions has been identified.

Corporate Restructuring Analysis of the Case :

An improved economic outlook and pent-up demand are creating new opportunities for executives who want to improve their organization's position through corporate restructuring, mergers, and acquisitions. Capturing maximum value requires a thorough understanding of debt and corporate restructuring options, as well as a keen ability to identify strategic opportunities to improve competitive position. In Corporate Restructuring, Mergers, and Acquisitions, you will acquire a portfolio of proven financial management strategies for enhancing and sustaining corporate performance in a recovering economy.The deal created an entity with an asset size of Rs 1,09,718crore (7th largest in India), providing massive scale economies and improved distribution with 1,148 branches and 2,358 ATMs (the largest in terms of branches in the private sector). CBoP's strong SME relationships complemented HDFC Bank's bias towards high-rated corporate entities.

There were significant cross-selling opportunities in the short-term. CBoP management had relevant experience with larger banks (as evident in the Centurion Bank and BoPinThe merged entity will not lend home loans given the conflict of interest with parent HDFC and may even sell down CBoP's home-loan book to it. The retail portfolio of the merged entity will have more by way of unsecured and two-wheeler loans, which have come under pressure recentlytegration earlier) managing business of the size commensurate with HDFC Bank.

Consideration: Consideration means something in return. Consideration is the concept of legal value in connection with contracts. It is anything of value promised to another when making a contract. It can take the form of money, physical objects, services, promised actions, abstinence from a future action, and much more. - TYPES OF CONSIDERATION- 1.MONETARY : It means pertaining the money. It includes cash in hand/bank/demand draft/cheque and so on. 2. NON MONETARY : It means which is not pertaining to money. It includes issue of share capital, retained earnings and all other items in Shareholders Equity.The HDFC Bank-Centurion Bank merger was agreed upon by both the banks in principle. This will create the largest private sector financial institution in terms of branch network. The share-swap deal, worth over Rs. 10,000 cr, may be worked around the current market price of Rs. 57 a share of CBoP.

Swap Ratio:

The ratio in which an acquiring company will offer its own shares in exchange for the target company's shares during a merger or acquisition. To calculate the swap ratio,

companies analyze financial ratios such as book value, earnings per share, profits after tax and dividends paid, as well as other factors, such as the reasons for the merger or acquisition.Here the acquirer company is HDFC Bank and the target company is Centurion Bank of Punjab.

$$\text{Swap Ratio} = \frac{\text{Offer Price Made to the Target Company by the Acquiring Company}}{\text{Current Share Price of Acquiring company}}$$

$$= 1.29$$

Which means 1.29 share of Acquirer Company's stock for each shares of Targets company's stock.CBoP shareholders will get one share of HDFC Bank for every 29 shares held by them.The total number of shares in the merger entity =319389508+(0.03448*1 698989540)=37,79,75,454 shares.

Methods of Valuation of Share/stock Price

INTRINSIC VALUE METHOD

Gross Block	670.4	887.13	930.55
Less: Accumulated Depreciation	533.97	577.57	593.67
Net Block (A)	136.43	309.56	336.88
Current Assets			
Cash & Balances with RBI	331.9	556.52	1079.14
Balance with Bank, Money at Call	131.04	498.52	410.19
Advances	2193.95	6533.44	11221.35
Net Current Assets (B)	2656.89	7588.48	12710.68
(A)+(B)	2793.32	7898.04	13047.56
Other Liabilities & Provisions	447.51	947.78	1292.07
	3240.83	8845.82	14339.63
Total Debt	3574.13	9451.21	15794.61
Funds available to shareholders	-333.3	-605.39	-1454.98
Sharevalue (per share)			-92.8572
YIELD BASIS METHOD			
Profit Before Tax	-98.54	1.09	195.1
ADD: Preliminary Exp	0	0	0
LESS: Corporate Dividend Tax	0	0	0
Profit After Tax	-98.54	1.09	195.1
NRR			14%
No of shares			15.669
Sharevalue (per share)			1.743
FAIR VALUE METHOD			
Sharevalue (per share)			-45.5571

(Instrinsic value method + Yeild Basis Method)/2

Market Value Price Exchange Ratio:

$$= \frac{\text{Current market price of Acquiring company X Swap Ratio}}{\text{Current market price of target company}}$$

$$= \frac{533.15 \text{ X } 1.29}{57}$$

$$= 12.066$$

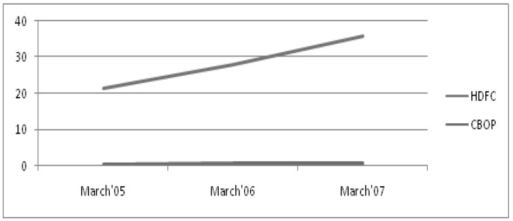
Boot Strapping EPS:

It means the ability of a company to increase its EPS through purchase or acquire of other companies.

 ISBN: 978-81-910118-7-6

Pre Merger Analysis of HDFC and CBOP

EPS	March'05	March'06	March'07
HDFC	21.47832	27.81	35.74
CBOP	0.24	0.62	0.77



In HDFC there is around 30% growth in EPS on year basis but coming to CBOP bank, its earning is very less not even 1 rupee.

Merger Report of HDFC & CBOP

Basic	46.22	52.85	67.56
Diluted	45.59	52.59	66.87

POST Merger Key Ratios

	Mar 08	Mar 09	Mar 10
EPS	44.87	52.77	64.42
DPS	8.5	10	12
Operating margin(%)	30.78	19.87	24.36
Gross profit margin(%)	28.58	18.05	22.39
Net Profit margin(%)	12.82	11.35	14.76
ROCE	5.20	5.96	4.96

EPS Analysis before Merger:

- The earnings of HDFC bank in 2007 is Rs. 141,45,00,000
- The earnings of CBOP in 2007 is Rs. 121,38,00,000
- Number of shares of HDFC bank in 2007 is 31,93,89,608
- Number of shares of CBOP in 2007 is 169,89,89,540
- EPS of HDFC Bank in 2007 is Rs 35.74per share
- EPS of CBOP in 2007 is RS 0.72 per share
- The swap ratio for the merger is 1 share of HDFC bank for every 29 shares held by CBOP
- Exchange Ratio=1 share of HDFC/29 shares of CBOP=0.03448
- The total number of shares in the merger entity = 31,93,89,508 (0.03448*1698989540) = 37,79,75,454 shares
- EPS = (11414500000 + 1213800000) / 377975454 = 33.41

	HDFC Bank EPS	CBOP EPS
Pre Merger	35.74	0.72
Post Merger	33.41	1.15

From the EPS analysis we can say that the target company CBOP gains and the acquiring company HDFC losses. So there may be some synergy loss for the HDFC bank.IN pre-merger the EPS of CBOP is 0.72. After Merger the EPS raise to 1.15 that is almost 160% for the Pre merge EPS. In pre-merger the HDFC EPS is 35.74per share. After merger the EPS for HDFC is falls to 33.41 per share. That's why the shareholders of the HDFC bank do not have the interest for merging of CBOP in HDFC bank. The shareholders of CBOP were happier for this merger. Because of this merger proposal the share value of the CBOP has increased on that day & the share price of the HDFC Bank has decreased.

Maximum Possible Offer Price:

The maximum possible offer price is that price which is not going to harm EPS of acquirer.

Maximum Possible Offer Price = EPS of Target Company X P/E ratio of acquirer

In this case : .77 X (533.15/35.74) = 11.49 (Approx.)

Merger Report of HDFC & CBOP

Gross profit margin (%)	Mar 05	Mar 06	Mar 07
HDFC	21.45	26.35	30.5
CBOP	3.78	5.92	12.23

Net profit margin(%)	Mar 05	Mar 06	Mar 07
HDFC	14.24	15.55	13.57
CBOP	5.96	8.28	7.25

ROCE	Mar 05	Mar 06	Mar 07
HDFC	4.02	4.18	5.02
CBOP	5.11	5.36	4.99

Gross profit and Net profit Margin of Both are increasing year on year by % of range may be different due its scale of Business. Coming to most important Ratio ROCE for HDFC there is steady growth but coming to CBOP its different story.

DPS	March'05	March'06	March'07
HDFC	4.5	5.5	7
CBOP	-	-	-

Dividend Payout Ratio	March'05	March'06	March'07
HDFC	420.95136	19.77706	19.5859
CBOP	-	-	-

HDFC is paying dividend to their shareholders every year, but in the case of CBOP it is not paying any dividend to their shareholders.

Merger Report of HDFC &CBOP

On the net interest margin front, HDFC bank has a net interest margin of 4.3% while CBOP has an NIM of 3.6%.The current & saving account(CASA) stands at 50.9% for HDFC bank & CBOP, respectively.

Talking about the NPAs, HDFC Bank has aa very low NPA of 0.4% as against 1.6% for CBOP.

The capital adequacy for HDFC Bank stands at 13.8% as against 11.5% for CBOP. Analysts say the merger will create strong banking entity.

Profitability Ratios:

Operating margin(%)	March'05	March'06	March'07
HDFC	24.65	29.56	33.15
CBOP	11.02	10.85	15.69

The operating margin of HDFC gradually increases Y-to-Y. The operating margin of CBOP is moderate with increase and decrease.

Liquidity Ratio:

Current ratio	Mar 05	Mar 06	Mar 07
HDFC	0.28	0.29	0.26
CBOP	0.75	0.54	0.63

HDFC maintaining its current assets & current liabilities almost in constant way. In the case of CBOP the current ratio is high

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in 2005 compare to preceding year means it has high liquidity in 2005, in 2005 it goes down and again in 2007 it moves up.

Quick ratio	Mar05	Mar06	Mar07
HDFC	4.89	5.18	4.07
CBOP	6.4	8.03	10.15

The high liquidity position of HDFC is less compare to High Liquidity position of CBOP. This shows CBOP may have more cash & cash equivalent compare to their current liabilities.

Total debt/ equity	Mar 05	Mar 06	Mar 07
HDFC	10.32	10.53	10.62
CBOP	5.98	10.09	10.65

The debt portion in bank is almost 10.5 times to equity portion. It shows HDFC has more debts. In CBOP the debt portion increased from year to year. Compare CBOP,HDFC doing good.

Conclusions: Post Merger results are satisfactory but merger is to be taken in long term prospective. Following are some synergies made available to HDFC Bank. The swap ratio of 1:29 for HDFC-CBOP merger turned out to be more favorable for HDFC Bank than expected by the market. The swap ratio was based on the recommendations made by joint valuersDalal& Shah, an accounting firm, and Ernst & Young, a consulting firm. HDFC held 23.28 per cent in HDFC Bank at the end of December 31, 2007. HDFC will need about Rs 3,900 crores to raise its shareholding after it falls to around 19 per cent after the merger. The acquisition of Centurion Bank of Punjab (CBOP) - Rs 9,510 crore in the financial sector in India. However, the merged entity would still be 60% only the size of the country's, second largest lender, ICICI Bank. The market cap to branch ratio of HDFC Bank is Rs.721m where the same for CBOP is Rs.238m. Hence, HDFC Bank has been able to buy the franchisee of CBOP at almost one-third of what the market is currently giving to its own franchisee. If HDFC Bank manages to improve the productivity of these branches to even half the levels of HDFC Bank branches, the merger will become positive in longer term. The merger was EPS dilutive for HDFC Bank in the interim as reflected from above analysis of bootstrapping.The profitability ratios of CBOP are quite low, this looked an expensive proposition for HDFC in the short run but not in long run. Access to 394 branches of CBOP and an increased presence in southern and northern states170 of CBOP's branches lie in the North, concentrated in the National Capital Region (NCR,55), Punjab (78), Haryana (28); 150 of its branches are situated in the South, mainly in Kerala (91). Greater access to the North (Punjab and Haryana) as well as the South (particularly Kerala), thereby strengthening its presence in those regions. CBOP's strong SME relationships will complement HDFC bias towards highly rated corporates thus expanding HDFC's base. The creation of India's 7th largest bank, just behind public giants like Bank of Baroda, Bank of India.

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ISBN: 978-81-910118-7-6

A Study of RBI Policy Rates on Inflation and its Impact

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Abstract:

Like many countries, industrialized and developing, one of the most fundamental objectives of macroeconomic policies in Fiji is to sustain high economic growth together with low inflation. However, there has been considerable debate on the nature of the inflation and growth relationship. In the recent past, the thrust of the monetary policy of India was on reducing the annual inflation rate.

During the year 2009 to 2011, the inflation in India has crossed historical records and reached to unprecedented levels, and lying in the range of 9 . 14 %. The monetary authorities are striving hard to curb the inflation by adopting several monetary policy measures, the important amongst which are changes in CRR, repo and reverse repo rate, which directly influence the money supply in the market with immediate effect without creating any distortions in the economy.

In this paper the econometric study of impact of changes in CRR, repo rate and reverse repo rate adopted by the monetary authorities in curbing inflation is carried out and the model is formulated to evaluate the various alternatives to suggest the suitable policy based on the existing market scenario which can be implemented to curb the existing level of inflation.

Introduction:

The Reserve Bank of India (RBI) is the Indian central bank. The RBI's most important goal is to maintain monetary stability - moderate and stable inflation in India. The RBI uses monetary policy to maintain price stability and an adequate flow of credit. Rates which the Indian central bank uses for this are the bank rate, repo rate, reverse repo rate and the cash reserve ratio.

The Reserve Bank of India (RBI) raised repo and reverse repo rates 13 times in previous year. RBI also deregulated savings bank deposit rate with immediate effect. This step was taken to arrest rising inflation in Asia's third largest economy. But this RBI's decision to hike short-term lending and borrowing rates could lead to higher interest rates and impact the growth momentum of the economy.

An Indian company has postponed expansion plans and review future profitability projections after the Reserve Bank of India raised key interest rates. The central bank also revised the GDP growth rate for FY11-12 to 7.6% from the earlier 8%, while the projection of WPI inflation has been kept unchanged at 7% for March 2012.

 ISBN: 978-81-910118-7-6

Reserve Bank of India (RBI):

The Reserve Bank of India was inaugurated as on April 1 1935. Originally, the Reserve Bank was constituted as a shareholders' bank based on the model leading foreign central banks on that time. The bank's fully paid share capital was Rs. 5 Crores divided into shares of Rs. 100 each. Of this, Rs. 4, 97, 80,000 were subscribed by the private shareholders and Rs. 2,20,000 were subscribed by the Central Government. On January 1, 1949 the Reserve Bank of India started functioning as a state owed central banking institution.

As per Reserve Bank of India Bulletin RBI aims at the promotion of monetary integration of the economy, filling in the "Credit gaps". The preamble to the Reserve Bank of India Act, 1934 spells out the objectives of the Reserve Bank as "to regulate the issue of banking notes and the keeping of reserve with review to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantages.

Objectives of RBI:-

- To regulate the financial policy and develop banking facilities through the country.
- To remain free from political influence and be in successful operation for maintaining financial stability and credit.
- To act as the note issuing authority, bankers' bank and banker to government and to promote the growth of the economy within the framework of the general economic policy of the government, consistent with the need of maintenance of price stability.
- To assist the planned process of development of the Indian economy.

Other important tasks of the Reserve Bank of India are:

- to maintain the population's confidence in the system, to safeguard the interests of those who have entrusted their money and to supply cost-effective banking systems to the population;
- to manage foreign currency controls: facilitating exports, imports and international payment traffic and developing and maintaining the trade in foreign currencies in India;
- issuing money (the rupee) and adequately ensuring a high quality money supply;
- providing loans to commercial banks in order to maintain or grow the Gross National Product (GNP);
- acting as the government's banker;
- acting as the banks' banker.

RBI Repo Rate or Key Short Term lending Rate:

When reference is made to the Indian interest rate this often refers to the repo rate, also called the key short term lending rate. If banks are short of funds they can borrow rupees from the Reserve Bank of India (RBI) at the repo rate, the interest rate with a 1 day maturity. If the central bank of India wants to put more money into circulation, then the RBI will lower the repo rate. The

reverse repo rate is the interest rate that banks receive if they deposit money with the central bank. This reverse repo rate is always lower than the repo rate. Increases or decreases in the repo and reverse repo rate have an effect on the interest rate on banking products such as loans, mortgages and savings.

Reverse Repo Rate:

Reverse repo rate is another method used by the RBI to control spiraling inflation. When the RBI thinks too much money is floating in the economic system, it increases the reverse repo rate. This means that suddenly, the banks have a place to park their money which will fetch them a better rate of interest. Their money with RBI is completely safe. It is risk free.

Inflation:

The inflation rate in India was last reported at 9.34 percent in November of 2011. From 1969 until 2010, the average inflation rate in India was 7.99 percent reaching an historical high of 34.68 percent in September of 1974 and a record low of -11.31 percent in May of 1976.Inflation rate refers to a general rise in prices measured against a standard level of purchasing power. The most well known measures of Inflation are the CPI which measures consumer prices, and the GDP deflator, which measures inflation in the whole of the domestic economy.The current inflationary situation is way above the central bank's comfort zone of 5-6 percent. Higher inflation is not the only factor that is disturbing but it is also its stickiness that is frustrating. Headline inflation that is measured by the WPI (wholesale price index) has not come down to RBI's comfort level since December 2009 and has stayed above 8 per cent consistently from January 2010 onwards. The last time that inflation remained so high was from March 1994 to May 1995.

The current rise in inflation started from July 2009 (-0.62 per cent) from when it started to accelerate while the economy was still recovering from the significant global slowdown.From July 2009 it continued to show rising trends before reaching its recent peak of 14.86 percent in the month of April 2010 (see graph). Thereafter, moderating for some time, it again accelerated in the last three months. Inflation for the month ending March 2011 stood at 8.82 percent. There were arguments that as a higher base effect factors in, inflation will moderate from the first quarter of the 2011. In the month of October 2011 (See graph) again inflation reach to 10.06 percent on that time again RBI revised their rate. As a result of this now the inflation is declining.

Figure 1 India Inflation Rate

Impact On Economy:

One of the major functions for any central bank is to strike a balance between inflation and growth. Rise of any one can imbalance the other. Therefore the current high inflationary situation and consequently

 ISBN: 978-81-910118-7-6

higher interest rates are definitely impacting the growth of the economy. The fact is well-captured in the observations based on Composite Leading Indicators (CLIs) developed by the OECD (Organisation for Economic Cooperation and Development) on the basis of parameters like IIP data, passenger car sales, call money rate, etc that provide early signals of turning points with regard to economic expansion andslowdown.

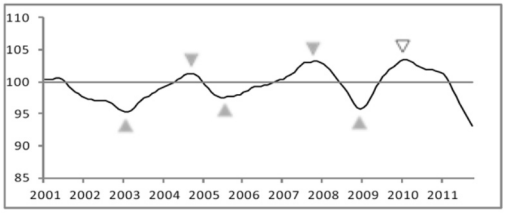


Figure 2:- Composite Leading Indicators for India

From March 2010, CLI for India has started showing signs of falling (see graph) and for the month of March 2011 it was 99.59, down from 99.78 computed in the month of February. The way this figure is interpreted is that if CLI is decreasing and is below 100 it connotes a slowdown in the economic activity which is the case with India. CLI for India has been below 100 since January 2011 and is decreasing month on month. The fact that the economy is decelerating is further reiterated by the recent 'on the record' acceptance by the finance. minister that the Indian economy will expand at a rate of 8 per cent for the year FY12, lower than what he had projected in his last budget speech of February 2011.

Therefore, it is quite clear that rising inflation and interest rate is weighing heavy on the economic growth rate. But the worse news is that despite raising rates by thirteen times since December 2011, the interest rates have not peaked out. This will ultimately impact the business growth which is already struggling from higher commodity prices. Here is a check on the sectors and companies that are likely to face a higher level of pressure.

Supply And Demand:

It is commonly believed that it is the supply side constraint and structural bottlenecks that lead to a high rate of inflation every time the economy picks up. The current situation seems to be no different. However, if we dissect the WPI data the reason for such a sharp increase can be attributed to both supply as well as demand side factors. Initially it was the supply side reaction due to the deficient monsoon of 2009 in most parts of the country, which led to lower agricultural production and higher prices. This fact is clearly reflected in the food inflation that has remained constantly in double digits from June 2009 to January 2011. Prior to that (between FY05-FY09), food inflation largely remained in single digits.

Apart from food inflation, fuel and power saw a significant rise in their prices due to a sudden and steep rise in the price of the crude oil due to the geo-political risks that came up. However, it is not only the supply side alone that is making the RBI's effort less effective. We find that the demand side pressures are equally playing their own part to fuel inflation. As inflation in manufactured products has

refused to decline substantially, unlike food articles' prices, it has become a bit of a puzzle as to how manufacturers are passing on increased input prices to customers, despite low demand. The overall macroeconomicscenario was not supporting demand. However, the demand would pick up in the next two quarters. This is predicated by many of the senior economist.

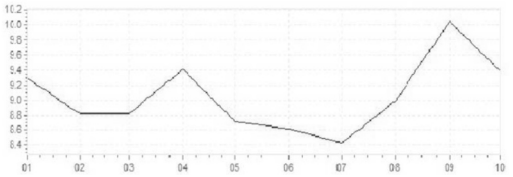
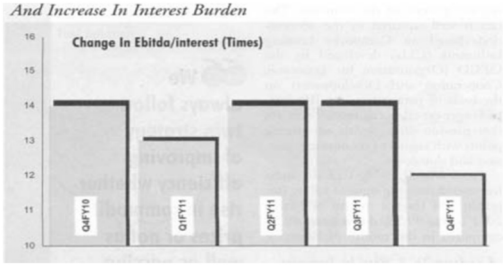


Figure 3:-CPI (consumer price index) inflation India 2011 (yearly basis)

Impact on Sectors:

Needless to say that interest rate-sensitive sectors and companies with a larger debt to equityratio will be most affected by the rising interest cost. Some of the sectors due to the nature of being more capital intensive like construction, power, telecom, etc are likely to be hit most due to their high leverage. Apart from the increase in the interest burden it also seriously impacts any capex1 plans by the companies. According to data compiled by CMIE (Center for Monitoring Indian Economy), India industry has a pipeline of projects worth Rs 22,00,000 crore lined up for 2010-13. Out of these, projects worth Rs 5,50,000 crore were expected to be commissioned in 2010-11, Rs 8,50,000 crore in 2011-12 and Rs 8,00,000 crore in 2012-13.

Moreover, according to reports, CMIE estimates that power, steel, road transport and allied services, telecommunications and petroleum are the sectors (in that order) wherein companies have announced mega investments for the next few years. The power sector alone is expected to commission projects worth Rs 4,40,000 crore by March 2013 to add generation capacity of 81,000 MW. Though these are long-term investment programmes and financial closures must have been achieved earlier, the interesting thing to point out is the implementation of the base rate. As banks now cannot lend below these rates any increase in the base rate will increase the interest burden for the companies and will directly hurt their financials.



Money spent to acquire or upgrade physical assets such as buildings and machinery. This tends to be a very large expense for companies with significant manufacturing facilities, and usually much less of an expense in the services sector. Also called capital spending or capital expense. declared their Q4FY11 results (excluding finance companies), the finance cost has increased from 1.69 per cent of sales in Q4FY10 to 1.87 per cent of sales in Q4FY11. Some of the sectors that have been hit the hardest are construction, telecommunication, steel, etc that saw their interest cost as percentage of sales increasing anywhere

 ISBN: 978-81-910118-7-6

between 2-10 bps. Some of the sectors that remained largely untouched are IT-enabled services that saw their interest burden declining. The above analysis shows that the rising interest rate has not yet dented India Industry financials as much.

Commodity Prices:

After touching a low towards the dusk of 2008 and dawn of 2009, the commodity prices started to show signs of revival as various economies around the world provided stimulants to get out of the worst ever economic slowdown since the Great Depression. By the start of the year 2011, the prices were raging. The S&P GSCI2, a bench-mark for investment in the commodity markets and as a measure of commodity performance comprising 24 commodities from all commodity sectors, is up by more than twice from where it was in February 2009. The reasons for such high commodity prices are not only growing economies, which demand more and more raw materials to fuel the growth, but several other factors too.

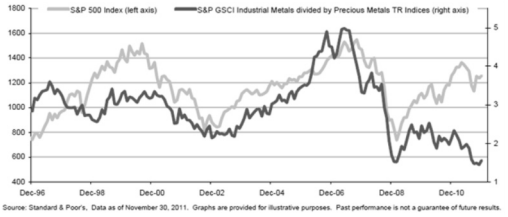


Figure 4: - S&P 500 and S & P GSCI Industrial Metals Index Divided by the S & P GSCI Precious Metal Index Ratio: Dec 1996- Dec 2011

Chief among these is the emergence of commodities as an asset class. Since early 2000, commodity futures have surfaced as a popular asset class for many financial institutions. According to a CFTC3 staff report (2008), the total value of various commodity index-related instruments purchased by institutional investors had increased from an estimated USD 15 billion in 2003 to at least USD 200 billion in mid-2008. The reason for this increase was the lower or negative correlation that existed between commodity returns and stock market returns before 2000. But things changed with the dotcom bust and the collapse of the equity markets in the year 2000 with commodities starting to attract lot of funds as a hedge against stock market volatility. However, after that the correlation changed between the stock market and commodities. What did not change was the monetization of the commodity market. It can be inferred from the rise in the flow of funds to the commodity market, which rose to USD 9.61 billion in the first quarter of CY11 compared to just USD 2.77 billion in the same time in 2010, according to EPFR Global.4 What further helped increase the prices is the accommodative monetary policy provided by the Federal Reserve Bank resulting into QE2 (Quantitative Easing 2)5. This fundamentally changed the way commodity prices are currently deter-mined. The law of demand and supply which used to be the prime factor for the price determination of commodities no longer holds true. It has become more of a portfolio re-balancing act between the different asset classes that is driving the prices. Commodities have beaten stocks, bonds and the dollar for five consecutive months till the end of April

2011. However, in 2011, there was some black swan events too like the floods in Australia, earthquake in Japan and political unrest in the Middle East and North Africa, which have somewhat influenced prices of some of the commodities.

Impact On India Industry:

Whatever may be the reasons for the increase in the prices of commodities, it is always bad news for India Industry. The 1,065 companies that have announced their Q4FY11 results so far (excluding financials companies) have seen their raw material prices going up by 31 per cent compared to last year. And with regard to the percentage of topline, it has increased from 44 per cent of sales (Q4FY10) to 48 per cent of sales (Q4FY11). Some of the major sectors that saw a steep rise in their raw material cost include aluminum, steel, pharmaceuticals and 3 Commodity Futures Trading Commission. The federal agency created by Congress in 1975 to regulate futures trading and protect participants against manipulation and fraud, through its administration of the Commodities Exchange Act. 4 EPFR Global provides fund flows and asset allocation data to financial institutions around the world through its proprietary Web Interface. 5 Quantitative easing was intended to stimulate an economy through a central bank's purchase of government bonds or other financial assets. auto ancillary. Their raw material cost as a percentage of sales increased by 12 per cent, 9 per cent, 7 per cent and 5 per cent respectively.

When we see the overall impact of the rising interest rates and commodity prices on the bottom line of the companies, we believe it is yet to make any sizeable impact. The net profit margin is down marginally by seven basis points.

Conclusion:

Despite RBI's desperate attempt to bring the monster of inflation under control, it showing good sign in controlling inflation. The average inflation of India in 2011: 9.08 %. Now Food inflation shrank by 2.9% in the week ended December 31 after shrinking by 3.36% in the preceding week as per the Commerce & Industry Ministry. Meanwhile, inflation in the Non-Food Articles space rose to 1.3% in the week under review from 0.85% in the previous week, the Government data showed.

Though international commodity prices have declined, rupee depreciation has blunted that effect on India. The RBI is very concerned about the impact of rupee depreciation on inflation. Still the inflation in manufactured products has refused to decline as per the current situation. According to GDP data, private final consumption growth fell to 16.09 per cent in the second quarter of 2011-12 year-on-year, from 16.31 per cent in the first quarter, which was also a low economic growth period. The other factors that will keep the inflation at elevated levels are a hike in the fuel prices.

The government has already hiked the petrol price and an increase in diesel prices many times in 2011. This will have a cascading effect and FMCG and consumer durable companies will find their distribution

 ISBN: 978-81-910118-7-6

cost increasing. Now the government of India had stop the decision regarding petrol price hike this may help India to decrease the inflation effect in economy.

The sectors that are going to be hit the hardest are real estates, auto, cement and steel. Rising interest rates and commodity prices will slow down the demand for autos and it may even dampen the capex cycle, hurting the demand for steel and cement. Banks might also face higher NPAs going forward and their credit growth may get keyed down. The least affected will be IT companies. The last time such a scenario (rising interest rate and commodity prices) was witnessed was in the year 2006-07.

RBI is continuously increasing interest rate which will probably hurt growth in the near term but is definitely a step which will help in setting straight the various anomalies that are currently inflicting the economy and in turn Indian industry at the macro level. All this will put the Indian economy back on the growth track helping it to grow at its true potential rate.

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Critical Analysis of Mutual Fund Industry: An Approach towards Causes for Low Penetration among Individual Investors-With Special Reference to Nasik District

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Abstract:

Mutual funds which are known as investment option can also prove as one of the most effective mechanism for economic growth of the country. It is specially devised for middle class people who can get the benefits of investing in equity market with minimized risk. If the idle resources of the middle income group will be diverted to equity market. From this perspectives mutual funds play vital role in the development of financial system.

But its performance in India is poor as compared to the other countries in the world. This research will help to identify the causes for it along with ways and means to overcome this problem.

Key Words: *Mutual Funds, Low penetration, performance analysis*

Introduction:

Financial development can be viewed as a process that enhances four critical attributes of financial system efficiency, stability, transparency and inclusion. The emergence of intermediation mechanism and products that help to improve one or more of these without causing other to weaken are therefore meaningful indicator of financial development.

From this perspective mutual funds play important role in the development of the financial system. They pool the resources of small investors and increase their participation in financial sector. Being institutional investors they are able to invest in the market which are not generally accessible to individual investors. Decisions taken on the basis of deeper understanding of risk and return contribute to financial stability. Besides helping to mitigate market risk transparency in investment is also maintained.

At present there are 44 mutual fund houses in India with more than 6000 schemes. The asset under management as on march 2013 is 8,16,400 Crores. It was 722526.08 Crores as on November 2012. The industry has grow exponentially since inception from 2500 Crores of AUM in 1967 to 722526.08 in 2012. But in spite of being available in market for such a long time asset of mutual funds in India constitute less than 10% of GDP and less than 10% of household have invested in mutual funds. (Source)

 ISBN: 978-81-910118-7-6

Last few year there took a series of events within and outside the Indian economy which deleteriously affected the industry. The mutual fund industry, beset by net redemptions by investors and adverse global and local market conditions, shrank by 1.6%in terms of assets under management during the year FY2011-2012.

Tough times can be seen as an opportunity for the industry to reinvent itself. The industry has moved beyond the first phase in which it established itself as a part and parcel of the investment matrix. The industry needs to evolve again to strengthen its position.

This research will include analytical study of mutual fund industry which will contribute to growth of the industry as whole.

Review of Literature:

- **The Indian Mutual fund industry** has witnessed considerable growth since its inception in 1963. The assets under management (AUM) have surged to Rs 4,173 bn in Mar-09 from just Rs 250 mn in Mar-65. In a span of 10 years (from 1999 to 2009), the industry has registered a CAGR of 22.3%, albeit encompassing some shortfalls in AUM due to business cycles
- **Sanjay Kant Khare** (2007) opined that investors could purchase stocks or bonds with much lower trading costs through mutual funds and enjoy the advantages of diversification and lower risk. The researcher identified that, with a higher savings rate of 23 percent, channeling savings into mutual funds sector has been growing rapidly as retail.
- **Dr. Binod Kumar Singh** (2012) His study shows that most of respondents are still confused about the mutual funds and have not formed any attitude towards the mutual fund for investment purpose. It has been observed that most of the respondents having lack of awareness about the various function of mutual funds. Moreover, as far as the demographic factors are concerned, gender, income and level of education have significantly influence the investors' ' attitude towards mutual funds. On the other hand the other two demographic factors like age and occupation have not been found influencing the attitude of investors' ' towards mutual funds. As far as the benefits provided by mutual funds are concerned, return potential and liquidity have been perceived to be most attractive by the invertors' followed by flexibility, transparency and affordability. Apart form the above, in India there is a lot of scope for the growth of mutual fund companies provided that the funds satisfy everybody's needs and sharp improvements in service standards and disclosure.
- **Dr. Bernadette D' Silva** (2012) His studies implies that investors with different educational level have vast difference in their perceptions towards ranking investment attributes of mutual fund. Finally the study also analyses

that the purpose of an investor behind investing in Mutual Fund definitely influence in the selection of the Mutual Fund scheme for investment. Thus the need of the hour for all the domestic mutual fund companies is to expand their investor base which can be possible, only when the companies are determined to understand the value drivers and thus lure retail investors to invest in mutual funds.

- **Dr. Ashwini Kumar and N. Venkatesh Kumar:** Mutual fund Investors were expected to benefit from the initiative taken by the Securities Exchange Board of India (SEBI) i.e. to remove entry load on all mutual fund schemes from 1st August 2009. This initiative was targeted at increasing the retail investors participation in mutual funds but, it does not influence the investment style of investors who invest more than Rs. 5 crores. Removal of entry load brings certain amount of merits as well as demerits to the core participants of mutual fund industry say Investors, Distributors, Government and obviously Mutual fund.. In order to analyse statistically significant impact on Net New Money on account of removal of entry load, Shapiro Wilk test (Normality), Durbin Watson test (Serial correlation of residual Net New Money), ANOVA (Homogeneity of average Net New Money) and Levene's statistic (Homogeneity of variance of Net New Money) were used and witnessed statistical insignificance i.e. changes in entry load structure did not impact the Net New Money during the study period.

Research Gap:

After going through primary literature review it is found that lot of work has been carried out on mutual fund scheme performance, preference of investors for investment in mutual funds their attitude towards it factors considered for investment in mutual funds but none of the study is being carried out to identify the causes for its low penetration among individuals.

As far as fund managers performance is considered research has not been carried out by comparing index funds and actively managed funds for their ability to outperform index funds.

The need of an industry is to reinvent itself and increase its customer base this research will include studying various facets of mutual fund such as changes in regulation, actions taken by AMC, perception of distributors, investors fund managers etc which might come across some useful suggestion for the industry to reinvent itself.

Need of Research Study:

India's savings rate is over 34 percent, which is one of the highest in the world. In order to accelerate economic development of our country, it is not only necessary to increase the rate of savings but also to improve the holding pattern of such savings. Savings held in the form of currency or physical assets either remain idle or kept unproductive or wasted. The efforts towards financialisation of savings and the

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general reluctance of the investing populous demand the active role of mutual funds. As investment in equity shares are too risky, mutual funds have to become efficient in mobilization and allocation of resources.

Less than 10% of household invest in mutual funds mutual funds are under tapped market in India 8% of GDP as compared to 105% in Australia and 77% in US. The mutual fund industry in India can grow at tremendous pace if it can reach out rural markets through financial inclusion initiatives.

Today, more and more private sector mutual funds are coming into the foray. An average investor is unable to take a decision as to which bandwagon should he hop on to.

The study can help researcher to find out following things

- The study will throw a light on the reasons which limits the growth of mutual fund industry in terms of individual investment
- It will help the researcher to find out the ways and means to tap the untapped market for mutual funds.
- It will help to study actions taken by AMC's to penetrate in the market and their effects.
- It will help to study the perception of investors about mutual funds
- It will help to know opinion of distributors about mutual funds
- The study will analyze Performance of mutual fund industry with special references to Index funds and actively managed funds which will help to find out ability of fund managers to outperform index funds
- It will also help to study the impact of entry load abolishment on performance of mutual funds

Statement of Research Problem:

1. The aim of research is to critically analyze the mutual funds for its performance, and find out the causes for its low penetration among individual investors and contribute for the growth of the industry by providing ways and means to tap the untapped market which in turn will help in growth of economy
2. Mutual fund industry was deleteriously affected in past few years and there is a need for industry to reinvent itself to strengthen its position, taking this into consideration research will include study of various facets of mutual fund industry such as impact of abolishment of entry load, performance of actively managed funds and index funds and actions taken by AMC's to tap the untapped market which will bring into light some useful finding which might help industry to reinvent itself.

Objectives of the Research:

1. To study the factors responsible for less popularity of mutual funds amongst individual investors.
2. To study actions taken by AMC's to penetrate in market and effects of it.

3. To study the perception of investors, distributors and fund managers about mutual funds
4. To study the impact of entry load abolishment on performance of mutual funds
5. To analyze the performance of Index funds and actively managed funds over a period of 5 years with the help of following parameters:
   - NAV
   - Returns since inception
   - Fund size
   - Sharpe, Treynor, Jensen and Eugene Fama's measures of portfolio evaluation
   - Tracking error in index funds.

Hypothesis:

1. The decision of entry load abolishment has impacted positively on performance of mutual funds
2. The schemes under study have performed as per the targets mentioned
3. There is no significant difference between performance of Index funds and Actively managed funds.
4. There is no significant difference between the index funds tracking the same index.
5. There is less awareness about benefits of investing in mutual funds among individual investors

Research Design & Methodology

" Decisions regarding what, when, how much, by what means concerning an inquiry on a research study constitute a research design".

The study will be the blend of qualitative as well as quantitative research for which both primary and secondary data will be needed . The analytical research will be done for the secondary data collected for performance evaluation of selected mutual fund schemes and descriptive research will be done for finding reasons for less popularity of mutual among individual investors along with opportunities and challenges.

Time: Time taken for carrying out the research will be limited to 24 months

- Period taken for the study of mutual fund schemes will be 5 years
- For studying the actions taken by AMC will be 5 years

Place: The primary data will be collected from urban and rural regions of Nasik district

Phases of research:

1. Exploratory phase: where efforts will be made to find out facts regarding mutual funds by conducting expert survey and collecting secondary data
2. Descriptive research phase: where primary data will be collected by using questionnaire method

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i) Sample Design :

For the any research data can be collected through probability & non probability sampling techniques. For given research problem researcher will use probability sampling method in that both systematic random sampling and simple random sampling will be used.

The list of distributors will be taken from AMC websites. And the survey of individual investors will be done by random sampling method. Since the population is large and homogenous the sample size will be confined to 400 urban and 400 rural respondents from Nashik district.

For primary data collection questionnaire will be designed separately for

- Individual investors
- For distributors
- For Fund managers
- For AMC

For secondary data sampling frame will include all the mutual fund houses from India. At present there are 43 fund houses in India.

The researcher will use systematic Multistage proportionate random sampling method.

For first stage: Out of 43 fund house proportionately 10% will be taken for study which approximately comes to 5 fund houses.

For second stage: 5% schemes of all five fund houses will be taken. 2000 (100)

For third stage : That 5% will be bifurcated into Index fund and actively managed funds. As per the known facts 20% of the schemes are Index funds and the 80% are actively managed so Proportionately schemes will be selected for the detailed study.

ii) Sources & Methods of Data Collection :

a) Primary Sources of Data Collection:

For the research study the data will be collected by structured questionnaire from individual investors and distributors in Nashik district by simple random sampling method.

b) Secondary Sources of Data Collection:

Secondary data will be collected from the sources like :

a. Journals

b. Magazines

c. Periodicals

d. Websites

iii) Field work :

The field work will be done in the area of Nashik district. It will include survey of investors and distributors.

iv) Processing of Data & Methods of Analysis & statistical Tools :

The data will be analysed by using graphs charts and statistical tools. SPSS techniques will be used to analyse the collected data to come to the conclusion

v) Chapter Schemes :

1. Introduction of the subject of research.
2. Literature Review
3. Research Methodology
   a) Primary data collection
   b) Secondary data collection
4. Data Analysis
5. Findings
6. Suggestion and Recommendations
7. Bibliography
8. Annexure

vi) Scope & Limitations :

For doing any research the researcher has to finalize his boundaries with respect to period and area. The geographical scope of this research will be total Nashik district and selected mutual fund schemes . The period taken for this research will be from 2009 to 2013 .

There are certain limitations also

a) As the researcher is going to collect information by taking interviews of the individual investors they might hesitate to talk about their financial matters.

b) Distributors might be bias while answering the questions.

c) As the researcher is going to complete this work within two to three years, so this is the short time to get all the information.

vii) Significance of the Study :

This topic has significance in many dynamics. It will throw light on current scenario of mutual fund industry. It will help investors by providing guidelines for fund selection with the help of checklist. It will also help industry where it can know the reasons for less participation of households and will provide the ways and means to cover the untapped rural and semi-urban market. It will help to find out impact of entry load abolishment on performance of mutual funds. It will help to reveal ability of fund managers to outperform index funds.

Study plan:

I. Literature Review : 07 months
II. Design of Questionnaire and Testing of questionnaire : 02 months
III. Primary Data Collection : 03 months
IV. Secondary data collection : 02 months
V. Data Analysis : 07 months
VI. Preparation of Thesis : 03 months

Total : 24 months

Conclusion:

At the end, researcher will get some good finding which will give the understanding about mutual funds industry in India its performance and growth in future which in turn will contribute to the growth of economy.

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Bfsi report on overview of mutual fund industry by www.rbi.org.in

Emerging Strategies for Big Data Management

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Abstract:

We are in the age of Big Data

- *Expectations from data consumers are unlimited data and timely access*
- *There is no way for organizations to "manage" the data*
- *We need to be able to pull what we want and connect the dots quickly*

Decision makers want to drive, not be driven.

One of the significant developments in the last decade of 20th Century was emergence and convergence of number of technologies and information systems affecting the business in the style, culture and the processes of its execution. Various trends in the information systems at operational level, management level, knowledge level and strategic level have made significant changes in academics as well as business environment. The concept of data are highly valued and reached up to intelligence level. The prominent hardware and software technologies such as Enterprise Resource Planning, Data Warehousing, Data Mining, Business Process Reengineering, Business Process Outsourcing, Business Intelligence, Supply Chain Management, Customer Relationship Management, Knowledge Management Systems, Geographic Information Systems etc together helped seamless integration of systems, information sharing and delivery, anywhere anytime in the world.

The expanding roles of Information Systems in Business Management were rooted from data processing in 1950-1960's, management reporting in 1960-70's, decision support in 1970-80's, strategic and end user support in 1980-90's to Electronic business and commerce in 1990-2000's.

Study of these Information Systems in order to integrate with information technologies is a multidisciplinary approach and not a single perspective captures the entire span of IS. Problems, Solutions and issues with the system are rarely all technical or behavioral.

The objective of this paper is to learn how organizations can begin to meld emerging strategies for big data managemnt into existing architectures and to be aware about key trends in IT enabled solutions.

Key Words: *Big Data, Business Process Outsourcing, Data ware housing, Data Mining, Customer Relationship Management, Supply Chain Management, Knowledge Management Systems, and Geographical Information Systems..*

Introduction:

State of Data warehousing:

- Data Warehousing has been around in some fashion for nearly 40 years and BI for nearly 20.

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- Other technology disciplines have evolved in dramatic ways over the same timeframe
- BI has remained relatively "the same"
  - Historical
  - Slow to implement
  - Focuses on "Slice and Dice"
  - Little advancement in terms of decision support

Operational issues:

Where do we start and how do we end?

- Silos
- Manpower
- Traceability, Audit, Lineage
- Version Control – of what?
- Release management
- Data and User governance
- Data inflation
- Information Paralysis Analysis
- Tool Proliferation
- Where is the ROI?
- Limited Self Service
- Query performance - over the weekend!
- Data ineQuality - Open a Problem Ticket!
- Documentation
- Upgrade costs - $$$

S2M – Source to Market

DW Platform Processing Engines….. need to understand how they work

- Understanding of the Processor architecture and component throughput
  - Multiple cores
  - Multiple nodes
  - Resource pooling
  - Virtualization Support – Internal or External
- Linkage to the Application development Teams
  - Availability of a simulator
  - E2E SWOT
- Impact on Query Development
  - Increase in Horsepower increases the skew
- Platform upgrade
  - DW Lifecycle focus – Extract, Load, Transform

Information Dynamics…….Velocity and Variety

- Frequency of Information Assimilation vs the Amount of Information dissemination
- More information variability increases the complexity of Processing
- **Information Velocity**
  - Cadence based
  - Market based
  - Process based
  - Rule based
  - Workload based
- Information Variety
  - Report based
  - Device based
  - Standards based
  - Governance based

Research on Information :

Type of industry

- Financials
  - High Velocity related to Higher Risk
- Industrial
  - High Variety due to process Complexities
- Services
  - Mid Velocity due to Lower Risk
- Technology
  - High Variety due to higher level of componentization

	Financials	Industrial	Services	Technology
Velocity	High	Mid	Mid	Mid
Variety	Mid	High	High	High

Patterns Data Tectonics can lead to an Information Meltdown.

Data Extortion....Fastest way to Information Insights

- Power shift to Business users expecting relevant data in Real Time
- Technology will have to focus on faster through put processing - Workloads & Transformations
- Increased usage of mobile devices will further push data on demand
- Integrated Self Service

Business Intelligence Trends :

The Challenge

- There is too much data
- Trend lines do not change – historical data is no longer news
- Changes in the data, especially the closer you get to real-time information, can be highly volatile
- Changes in the direction of data can be important, but it can be hard to assume what is a significant change and which isn't

The Trend

- Event driven alerting
- "Event" means that the change in the data is significant. Something else is happening to affect the change

Determined by using simple statistical analysis such as correlations, t scores and confidence intervals

Predictive Analytics :

The Challenge

- Historical data holds only so much value
- Organizations know the information in their BI systems can serve as headlights instead of rear-view mirrors
- Decision makers want the data to tell them what to do

The Trend

- Applying predictive analytical models to historical data to give answers to these questions:
- Where is this current trend taking us?
- What are the key variables in the data that move our KPI's in the right direction and vice versa?
- Where should we be focusing our time and energy?

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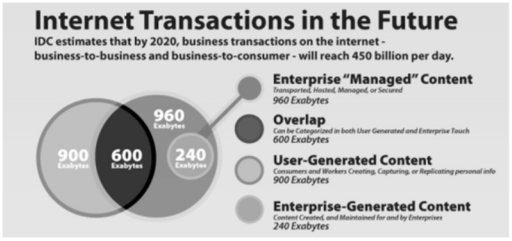
- Which of our customers should we be targeting with what products?

How much data exists in our digital universe? 1.2 Zettabytes

Predicted Data Universe For 2020

- By 2020, the amount of data in the digital universe will be 35 ZB.


Internet Transactions in the Future
IDC estimates that by 2020, business transactions on the internet - business-to-business and business-to-consumer - will reach 450 billion per day.
900 Exabytes
600 Exabytes
960 Exabytes
240 Exabytes
Enterprise "Managed" Content
Transported, Hosted, Managed, or Secured
960 Exabytes
Overlap
Can be Categorized in both User Generated and Enterprise Touch
600 Exabytes
User-Generated Content
Consumers and Workers Creating, Capturing, or Replicating personal info
900 Exabytes
Enterprise-Generated Content
Content Created, and Maintained for and by Enterprises
240 Exabytes

(Source: siliconIndia.com)

Crowdsourced BI, Text Mining, Mashups and DaaS (cont.) :

The Trend

- Text Mining – The ability to turn textual, unstructured data into quantifiable and tagged data sets that are customized to a company
- Mashups – Pulling and integrating data from multiple social networks, web 2.0 and other external sources in real-time
- Data-as-a-Service – The emergence of external conformed, cleaned data on demand that can be easily custom tagged and integrated with an organization's own data.
  - Management and QA of the data is no longer a cost to the organization
  - Easier integration points with BI, ETL and MDM tools
  - Pay for just the data you need and for how long you need it

Advanced Visualizations :

The Challenge

- The volume of data is overwhelming for decision makers
- Easy to get lost in the details
- Need to interact with the data for real time analysis
- The delay between question and answer is too long
- BI tools are still too complicated for the business users

The Trend

- Advanced Visualizations
- Goodbye spreadsheets – tired of getting lost in the data
- iPhone, iPad, ClikView, Flex, etc. – driving the visualization revolution
- Power to the people – analysis where it needs to happen

Meta Data Management :

The Challenge

- Companies continue with unresolved QA issues
- More data, different sources
- Data quality and management are not strengths
- Disparate data repositories, sets and silos will grow

The Trend

- Quality will need to get better

- Integration between many data sources will become more like plug-n-play
- Metadata information must be business centric, end-user perspective and JWINTKRWINTKI (Just-What-I-Need-To-Know-Right-When-I-Need-To-Know-It)…this is why the acronym JIT caught on much faster

Techniques:

Adaptive Business Intelligence can be defined as "the discipline of using prediction and optimization techniques to build self-learning decision making' systems". The power and strength of Adaptive Business Intelligence Systems reside in their ability to answer the two fundamental questions behind all information system decisions: What is the best decision right now? And what is likely to happen in future? The goal of Adaptive systems is solving real-world business problems that have complex constraints, possibly conflicting objectives, an enormous number of possible solutions and which are set in a time-changing environment. Adaptive Business Intelligence System incorporates prediction and optimization modules to obtain near optimal decisions and an adaptability module for improving future recommendations. Such systems can help business managers make decisions that increase efficiency, productivity, and competitiveness.

In India, a survey shows that the industries in manufacturing as well as service sector, institutions in academic sector use business intelligence tools for specific day to day activities. A survey shows that regardless of company size, and type of product the average company has roughly 3 to 4 BI tools per solutions currently deployed. When asked which software tools influences consider being part of their BI solution, for small organizations Excel is as much a part of their solution as analytics. For large organizations, dashboards, scorecards are at the top of their list, followed by analytics, query and multidimensional analysis.

Concept of Adaptive Business Intelligence is new emerging trend in India and there is lot of scope for automobile industries to build optimized decision making solutions for processes using modern optimization techniques.

There are some recent, successful implementations of adaptive business intelligence systems reported e.g., Michalewicz et al. [2005], which provide daily decision support for large corporations and result in multi-million dollars return on investment. There are also companies (e.g., www.solveitsoftware.com) that specialize in development of adaptive business intelligence tools. However, further research effort is required.

Trends in Adaptive Business Intelligence:

Data Mining: Data typically reside in one or more databases or in a data warehouse. Data mining is an analytical process of extracting data for finding relationships and patterns among database variables. (e.g. In a sales data if 'sale price, make, model and mileage are the variables then find the relationship between them)

 ISBN: 978-81-910118-7-6

Prediction: The basic function of a prediction module is to produce an output based on some input. To make the prediction module functional it is necessary to train the various underlying models using historical data. There are varieties of prediction methods to build different prediction models such as:

- Mathematical (e.g. linear regression, statistical methods)
- Distance (e.g. instance-based learning)
- Logic (e.g. decision tables, decision trees)
- Modern heuristic (e.g. fuzzy logic)

Optimization: A system or module capable of recommending the best answer. As every industry strives for excellence optimization techniques help managers to find better solutions through decision making. The output of this module is based on prediction module's output. Many different techniques can be used to construct an efficient optimization module such as:

- Linear Programming, Dynamic Programming, Queuing Models, Inventory Models
- Modern techniques include: Evolutionary algorithms, Tabu search, Simulated annealing

Adaptability: A system or module that would improve over time by learning from its own prediction errors is truly adaptive. Because today's accurate prediction might be inaccurate tomorrow, the prediction module must be capable of learning from and adapting to changes in the environment. e.g.

- Internet search engine which adapt search result to user's preferences.
- Running shoes which adapt their cushioning level to runner's size and stride.

Management of global information Systems:

International dimensions have become a vital part of managing business enterprise in the internetworked global economics and markets of today whether you become a manager in a large corporation or the owner of a small business, you will be affected by international business developments, and deal in some way with people, products or services whose origin is not from your home country.

Cell phone industry analyses user's call behavior and evolve pricing strategies, discount schemes based on pattern behavior.

National stock exchange warehouse provides trade intelligence which discovers unknown trading patterns and unexplained price movement which helps NSE in surveillance and other control functions.

RBI use Data warehouse to understand what influences money markets and to study individual banks, their positions in money market and monitor the changes in their positions.

LIC has a data warehouse of millions of policy holders. The study helps them to analyze the business in terms of policy holders, their social status, duration of policies, popular policies etc. This helps them to guide insurance agents as to concentrate for business.

Railways use passenger data to strategic resource planning. On the basics of traffic pattern, railways are in position to start holiday trains on selective routes.

Airlines analyze passenger data in terms of flight, destinations and in flight needs to offer fare discounts and offer most liked beverages, meals and movies.

Consumer goods industry uses Data Warehouse for product movement tracking and understanding cause and relationship between product, consumer and market segment to promote business in untapped market and to get more market share in growth market.

Banks in credit card business offer variety of attractive schemes to card holders by analyzing their buying pattern. This helps bank to increase credit card business volume.

Hospitals and health care industry analyses data from the warehouse on patient, disease treatment, success and failure, patterns and incidence etc. to plan health care resources and their effective deployment where needed most.

Tourism industry analyses data in tourist traffic in terms of country, length of stay, number of visits transport's preference and hotels to plan development

RFID system: In RFID system each item is fitted with RFID tags. The tag is an electronic radio transmitter comprising of a micro-chip and an antenna and tiny battery fixed on thin plastic sheet. This plastic sheet can easily be attached to a variety of items directly. They can be embedded inside identity cards and put on people or animals in a farm or any item in which you are interested in locating tracking its movements and so on. RFID has a small memory in which unique identification number is stored and it periodically sends out radio signal carrying and conveying unique identification number.

RFID technology can be gainfully deployed in educational sector, manufacturing, service and in retail stores. Its application can be feasible in any scenario where tracking something is most essential. RFID tags can be used on livestock to track their movements.

Portals of Information and Knowledge:

The India division of Cable and Wireless is a part of a global group of Cable and Wireless. Its core competency is in high end system integration and network management for enterprise markets. India division has central hub for providing back office support in managing extensive telecom network of the enterprise customers. The Company has over 6000 customers, speed in 33 countries including the customers in India. It has virtual support team spread across 70 countries. The knowledge developed and possessed by these teams is highly useful in managing company's operations.

Global Business and System Development Strategies:

Many businesses are becoming global companies and moving toward transactional business strategies in which they integrate the global business activities of their subsidiaries and headquarters.

 ISBN: 978-81-910118-7-6

This requires that they develop a global IT platform that is an integrated worldwide hardware, software and internet based network architecture.

Several strategies can be used to solve some of the systems development problems that arise in global management.

1. Transforming local application into global application
2. Setting up a multinational development team
3. Parallel development
4. Concepts of centers of excellence
5. To outsource the development work to global or offshore development companies who have the skills and experience required to develop global IT/business applications.

Conclusion:

Business Intelligence is undergoing an evolution. This paper helps to know how to handle meta data with the help of key trends that will drive BI in organizations, as well as the most important emerging BI technologies, and which vendors will provide them. Also it finds how organizations can begin to meld emerging trends into existing architectures. For those who like to stay ahead of the curve, and want to help shape the future, this paper focuses on the future of Business Intelligence

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Conference:

January 29th 2011, Silicon India's Business Intelligence Conference, Pune

VHDL Simulation of Key Set Up and Key Stream Generation Block of RC4 Stream Cipher for Wi-Fi Security

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Abstract:

In this paper, implementation of RC4 stream-cipher is proposed. Simulation module of RC 4 stream cipher is designed. Various individual modules of Wi-Fi security have been designed, verified functionally using VHDL-simulator. RC4 uses a variable length key from 1 to128 bytes to initialize a128-byte array. The array is used for subsequent generation of pseudo-random bytes and then generates a pseudorandom stream, which is XORed with the plaintext/cipher text to give the cipher text/plaintext. The RC4 stream cipher works in two phases. The key setup phase and the key stream generator phase. Both phases must be performed for every new key. The RC4 algorithm will be implemented by FPGA using VHDL software platform.

Key Words: *VHDL simulation, RC 4 stream cipher, Wi-Fi Security, FPGA.*

Introduction To RC4 Stream Cipher:

State of Data warehousing:

In this section, the details of the RC4 stream cipher algorithm are discussed. RC4 algorithm was introduced in 1987. The Ron Rivest is the name of the person who has introduced this algorithm. RC4 is named as "Rivest Cipher 4". The RC4 algorithm has remained secret from 1987 to1994. After this time, RC4 algorithm was disclosed in the market/ on internet. Then after the disclosing of this algorithm; the researches started investigating its various properties. Then researchers found lot of weaknesses in this algorithm [1]. RC4 is a binary additive stream cipher. It uses a variable sized key that can range between 8 and 2048 bits in multiples of 8 bits (1 byte). This means that the core of the algorithm consists of a key stream generator function. This function generates a sequence of bits that are then combined with the plaintext with XOR. Decryption consists of re-generating this key stream and XOR'ing it to the cipher text [4].

Proposed Block Diagram of RC4 Stream Cipher:

The block diagram of the proposed architecture is shown in Figure1below. The block diagram can be divided in to 6 different sub modules as shown and these sub modules are i)The payload data processor and controller ii) SMC iii) Key set up and key stream generation block iv) K-Stream serializer v) KRAM(256× 8) vi) Multiplexer. The simulation of payload data

 ISBN: 978-81-910118-7-6

processor and controller block is already presented earlier [2]. Some selected 3 sub module simulation is also presented earlier [3] i.e KRAM (256×8), Multiplexer, K Stream Serializer .So, these modules are not discussed further in this paper. The paper deals with Key set up and key stream generation block. Simulation of some selected modules of Key set up and key stream generation block is presented here.

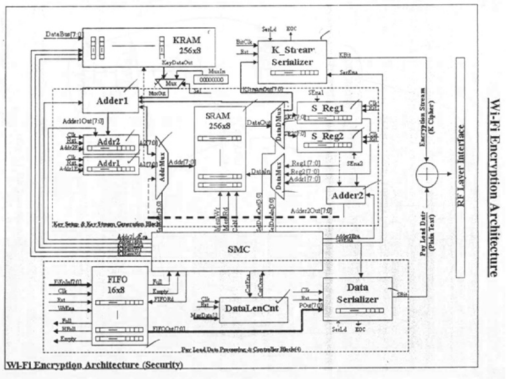

Fig. 1 Block Diagram of Wi-Fi Encryption Model

Simulation Results & Discussion:

As discussed earlier, in this paper, only some selected 5 sub modules simulation is presented i.e. Addr 1, S_Reg 1, Addr 2, S_Reg 2, Mux

A. Simulation of Addr 1 module – Fig.2 shows Addr 1 module .Here, the entity function is synchronized for rising edge of the clock. When Reset is asserted, entity is initialized to default value. The function of this module is to generate the address and data for the SRAM. We assign an integral signal Reg in this. If Reset is 0, then Reg is 0.Reg is incremented by 1 with every rising edge of the clock and when Addr1Ena is 1 it is further taken as the output. Fig.3 shows the simulation of Addr 1 module

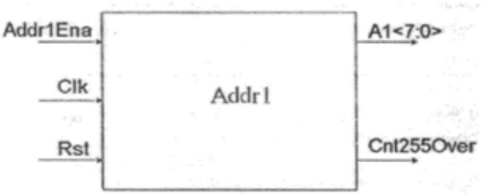

Fig. 2 Addr 1 module

Simulation Results

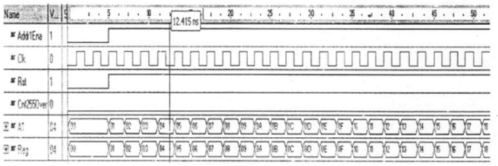

Fig. 3 Simulation of Addr 1 module

B. Simulation of S_Reg 1 module – Fig.4 shows S_Reg 1module. The entity function is synchronized for rising edge of the clock.When Reset is asserted, entity is initialized to default value.We are assigning Reg as an internal register.It mainly acts as a buffer.If SEnal is 1, then data is stored in the internal register.Whereas, if SEnal is 0, then the data stored in the internal register is taken as the output.Fig.5shows the simulation of S_Reg 1module.

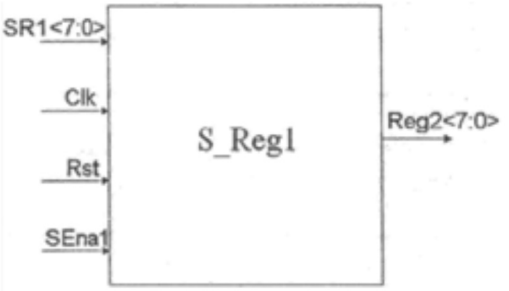

Fig.4 S_ Reg 1 module

Simulation Results

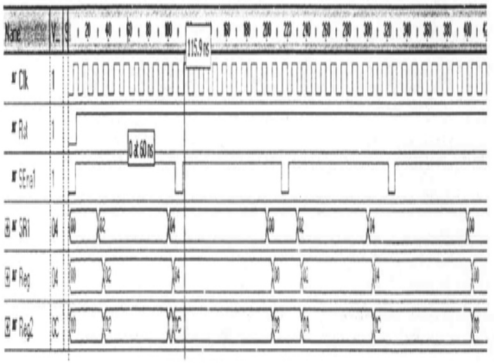

Fig.5 Simulation of S_Reg 1 module

C. Simulation of Addr 2 module – Fig.6 shows the Addr 2 module. The function of this block is same as Addr 1.In this, the entity function is synchronized for rising edge of the clock.When Reset is asserted, entity is initialized to default value.The function of this module is to generate the address for the KRAM.We assign an integral signal Reg to this .Two additional ports Addr2LdEna and Adder1Out are also used in this.If Reset is 0, then Reg is 0.But on rising edge of the clock and when Addr2LdEna and Addr2Ena is high, then data from Adder 1is loaded in to internal register which is taken as output. Fig.7 shows the simulation of the Addr 2 module.

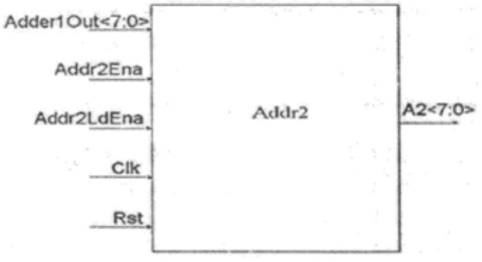

Fig.6 Addr 2 module

Simulation Results

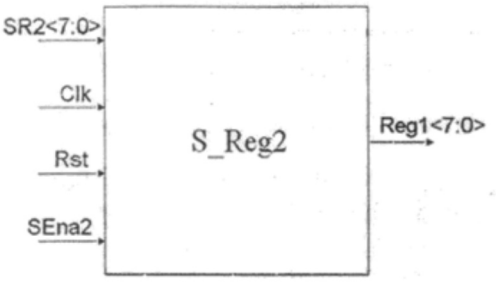

Fig.7 Simulation of Addr 2 module

D. Simulation of S-Reg 2 module – Fig.8 shows S-Reg 2 module .In this entity, the function is synchronized for rising edge of the clock.When Reset is asserted, entity is initialized to default value.We are assuming Reg as a 7 bit internal register.It mainly acts as a buffer.If SEna2 is 1, then the 7 bit data is stored in the internal register.Whereas, if SEna2 is 0, then the data stored in the internal register is taken as the output.Fig.9 shows the simulation of S-Reg 2 module.

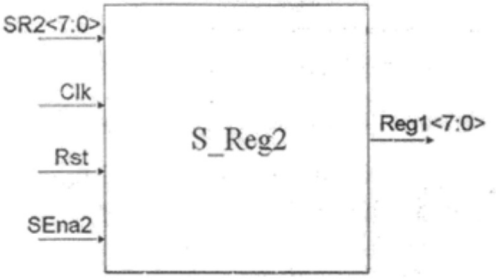

Fig.8 S-Reg 2 module

Simulation Results

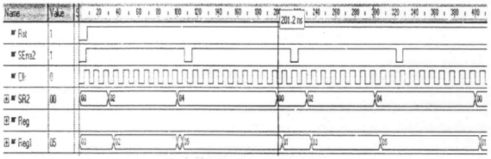

Fig.9 Simulation of S-Reg 2 module

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E. Simulation of Mux module – Fig.10 shows the Mux module. This module simply acts as a multiplexer. The input keyDataOut acts as the output from KRAM whereas DataIn is initialized to 0.We get the output as 0 whereas when Sel input is 1, the output is initialized to the value KeyDataOut. Fig.11 shows the simulation of Mux module.

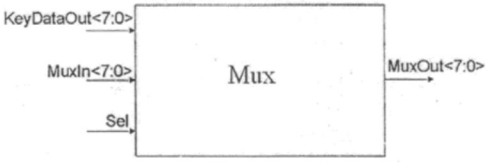

Fig.10 Mux module

Simulation Results

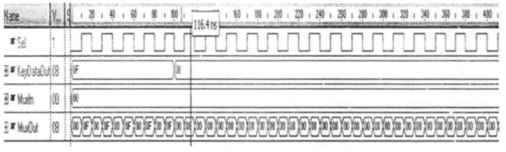

Fig.11 Simulation of Mux module

Conclusions:

Various individual modules of RC4 stream cipher for Wi-Fi security have been designed, verified functionally using VHDL Simulator, synthesized by the synthesis tool and a final net list has been created. The proposed design provides high data throughput using 8-bit word and variable key length, from 8-bit to 128-bit.It provides flexibility as it can be used in many applications with any key length from 8-bit to 128-bit.The design has been synthesized using FPGA technology from Xilinx. The said device belongs to the Virtex-E group of FPGAs from Xilinx. This design of the Wi-Fi security is capable of providing the desired security for the information that is transmitted through wireless network.

Design Summary

Target device: xv300e, Target package: fg456, Target speed:-8, Number of warnings: 261, Number of errors: 0, Total equivalent gate count for design: 42,094, Additional JTAG gate count for IOBs: 1200, Peak memory usage: 95MB

Acknowledgments:

Author would like to thank Dr.B.B.Lal, Principal, BKIT Bhalki, for his encouragement and Sri.Shahi.Lohar of Mechanical Engineering dept for his technical support while preparing this paper.

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A Literature Survey of Association Rule Mining Algorithm

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Abstract:

In this paper, we provide the preliminaries of basic concepts about association rule mining and review 15 scholarly articles related to association rule mining techniques. Of course, a single article cannot be a complete review of all the literature, yet we hope that the references cited will cover the major theoretical issues. This exhaustive literature survey is a preliminary to the proposed research which is to be further carried on. Data mining is used for mining data from databases and finding out meaningful patterns from the database. Many organizations are now using these data mining techniques. This review of literature focuses on how data mining techniques are used for different application areas for finding out meaningful pattern from the database. This paper also includes the steps involved in experimental design.

Key Words: *Association Rules, Rule Induction Technique, Apriori Algorithm, Neural Network, Decision Tree.*

Introduction:

Business Intelligence tools enable the organization to make real time decisions at all levels; i.e., strategic, tactical and operational, using advanced analytics and powerful data mining tools.

Recent technical achievements in data storage and database management systems have opened windows of opportunities for developing novel optimizing strategies for all kinds of organizations. The proposed research will introduces a new methodology to enhance organizational performance based on data mining approach. Data mining is a business process for exploring large amounts of data to discover meaningful patterns and rules. The proposed methodology focuses on e business activities and using a multilayer data mining approach, provides high level of business intelligence for enterprises that utilize ecommerce as their main transactional model. To improve the performance of business there is a need to design and implement an effective algorithm based on association rule and therefore the researcher has attempted to work on it.

It is presumed that the result of the proposed research work will help the industry for finding the accurate and useful mining information related to their data and also help in research of similar aspects and for anyone who likely to develop the interest in similar type of work. The proposed work will also help to reduce the present problem related to mining such as the repetitive I/O disk scan, huge computation involved during the candidate

 ISBN: 978-81-910118-7-6

generation and high memory dependency. So this work is proposed to reduce costly, repeated database scans as well as CPU time without compromising on accuracy.

Research Objectives:

i) To understand and explore the methods employed in various algorithms of data mining.

ii) To design efficient algorithm for mining Multiple-level association rule from large databases.

iii) To improve the efficiency of algorithm by reducing the repeated database scan operations.

iv) To compare the performance of proposed algorithm (AM e-biz) with the existing algorithms.

v) To implement the algorithm and test it for real time datasets to reduce costly, repeated database scans

Literature Review:

Literature review of 15 scholarly articles is presented below in tabular form. The various columns of the table reflect the purpose, the themes arising out of the review and the gaps identified.

Sr No	Source & Year	Title	Author	Contents/ Purpose	Aspect/Themes Emerging	Relevance/ Gap/Further Research
1	IBM Almaden Research Center 650 Harry Road, San Jose, CA 95120 2012	Mining Association Rules between Sets of Items in Large Databases	Rakesh Agrawal Tomasz Imielinski_ Arun Swami	We are given a large database of customer transactions. The algorithm incorporates buffer management and novel estimation and pruning techniques. They also present results of applying this algorithm to sales data obtained from a large retailing company, which shows the effectiveness of the algorithm	In this paper they introduced the problem of mining association rules Between sets of items in a large database of customer transactions.	According to them database mining is an important new application area for databases, combining commercial interest with intriguing research questions.

2	International Journal of Innovation, Management and Technology, Vol. 3, No. 5, October 2012 2012	Enhancing Organizational Performance through a New Proactive Multilayer Data Mining Methodology: An Ecommerce Case Study	Masoud Pesaran Behbahani1, Islam Choudhury2, Souheil Khaddaj3	This paper introduces a new proactive methodology to enhance organizational performance based on data mining approach. The proposed methodology focuses on e-business activities and using a multilayer data mining approach, provides high level of business intelligence for enterprises that utilize ecommerce as their main transactional model. These mining structures will act as the platform for applying the multilayer data mining models.	It appears from the preceding discussions and experimentations that the proposed multilayer data mining approach to an e business framework may increase overall amount of business intelligence that an enterprise can gain. The concept contains a new methodology and its associated mining structures and mining models. The paper used this novel methodology and introduced an optimized framework called EBAF, to provide intelligence for SMEs and help them to gain competitive advantages.	The next step of this research is planned to integrate the methodology into Multidimensional data and cube structures and also deal with fast generated data streams to support real time decision making.
3	IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 1, January 2011 ISSN (Online): 1694-0814 2011	An Efficient Approach to Prune Mined Association Rules in Large Databases	D.Narmadha 1,	Association rule mining finds interesting associations and/or correlation relationships among large set of data items. However, when the number of association rules become large, it becomes less interesting to the user. Thus, this paper presents a novel	This paper discusses the problem of selecting interesting association rules through huge volumes of discovered rules. This paper discusses a novel efficient approach to prune mined association rules in large databases. A fairly comparative analysis of different association rule mining techniques for market	It is crucial to help the decision-maker with an efficient post processing step in order to select interesting association rules throughout huge volumes of discovered rules. This motivates the need for association analysis. Their evaluation shows that an efficient approach to prune mined association rules approach

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3			G.Naveen Sundar 2, S.Geetha 3	approach to prune mined association rules in large databases. Further, an analysis of different association rule mining techniques for market basket analysis, highlighting strengths of different association rule mining techniques are also discussed. They wanted to point out potential pitfalls as well as challenging issues need to be addressed by an association rule mining technique.	basket analysis, highlighting strengths of different approaches, potential pitfalls as well as challenging issues need to be addressed by an association rule mining technique are also discussed. We believe that the results of this evaluation will help decision maker for making important decisions. They have evaluated the algorithms based on parameters like scalability, quality of filtered rules..	should be efficient and produce user interesting rules
4	An Improved Algorithm for Mining Association Rules in Large Databases 2011	World of Computer Science and Information Technology Journal (WCSIT) ISSN: 2221-0741 Vol. 1, No. 7, 311- 316, 2011	Farah Hanna ALZawaidah 1, Yosef Hasan Jbara 2	Mining association rules in large databases is a core topic of data mining. The proposed approach is derived from the conventional Apriori approach with features added to improve data mining performance. They have performed extensive experiments and compared the performance of their algorithm	The aim of this paper is to improve the performance of the conventional Apriori algorithm that mines association rules by presenting fast and scalable algorithm for discovering association rules in large databases. The approach to attain the desired improvement is to create a more efficient new algorithm out of the conventional one by adding new features to the Apriori approach.	One of the challenges in developing association rules mining algorithms is the extremely large number of rules generated which makes the algorithms inefficient and makes it difficult for the end users to comprehend the generated rules. Future work includes: 1) extensive empirical evaluation; 2) to real data like retail sales transaction and medical transactions

4				with existing algorithms found in the literature.	The proposed mining algorithm can efficiently discover the association rules between the data items in large databases.	to confirm the experimental results in the real life domain;
5	Intech ISBN: 978-953-307- 067-4, 2010	Discovering Web Server Logs Patterns Using Generalized Association Rules Algorithm	Mohd Helmy Abd Wahab1, Mohd Norzali Haji Mohd2 and Mohamad Farhan Mohamad Mohsin3	Web Usage Mining is an aspect of data mining that has received a lot of attention in recent year .In this paper they have focused on this aspect of data mining.	Commercial companies as well as academic researchers have developed an extensive array of tools that perform several data mining algorithms on log Files coming from web servers in order to identify user behavior on a particular web site. Performing this kind of investigation on the web site can provide information that can be used to better accommodate the user's needs	Thus, there is a need for robust methods that integrates different intelligent Techniques that is free of any assumptions about the noise contamination rate
6	Rakesh Agrawal 1 Ramakrishna n Srikant2 2009	Fast Algorithms for Mining Association Rules	IBM Almaden Research Center 650 Harry Road, San Jose, CA 95120	They considered the problem of discovering association rules between items in a large database of sales transactions. They presented two new algorithms for solving this problem that are fundamentally different from the known algorithms.	The algorithms presented in this paper have been implemented on several data repositories, including the AIX _le system, DB2/MVS, and DB2/6000. They have also tested these algorithms against real customer data,	They did not consider the quantities of the items bought in a transaction, which are useful for some Applications. Finding such rules needs further Work.

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7	ARM: A HYBRID ASSOCIATI ON RULE MINING ALGORITH M 2006	Zahir Tari 1 Wensheng Wu 2,	Springer journal	Most of the approaches for association rule mining focus on the performance of the discovery of the frequent item sets. They are based on the algorithms that require the transformation of data from one representation to Another, and therefore excessively use resources and incur heavy CPU overhead. They Proposes a hybrid algorithm that is resource efficient and provides better performance. In addition, they propose a comparison algorithm (CmpApr) that compares candidate item sets with a transaction, a filtering algorithm (FilterApr) that reduces the number of comparison operations required to find frequent item sets. ARM has better performance and scales linearly.	Based upon their study of association rule mining, they have proposed a sequential algorithm, ARM, which achieves better performance with the available resources and displays nearlinear scale-up behavior. . In the early iterations, it requires fewer resources than Partition, and in the late iterations, it performs faster than FilterApr.	Future work mayl consist of extending the proposed algorithms in a context of heterogeneous environments. Because usually there are multiple jobs running at the same time, the local resources, i.e., CPU, memory, disk, and communication resources, change over time. The challenge is to maximize performance.

8	Algorithms for Association Rule Mining – A General Survey and Comparison 2000	Jochen Hipp1, Ulrich G¨untzer 2,, Gholamreza Nakhaeizadeh 3,	SIGKDD Explorations Volume 2 issue 1	Today there are several efficient algorithms that cope with the popular and computationally expensive task of association rule mining. In this paper they have explained the fundamentals of association rule mining and a general framework is given.	In this paper the authors have dealt with the algorithm aspects of association rule mining. The advantages and disadvantages of all of them are listed based on the experiment carried out. There is not a single algorithm which is beating others.	
9	Association Rule Mining: A Survey 2003	Qiankun Zhao1 Sourav S 2 . Bhowmick3	Technical Report, CAIS, Nanyang Technological University, Singapore, No. 2003116,	In this paper, we surveyed the list of existing association rule mining techniques	This investigation is prepared to our new project titled mining historical changes to web delta.	Thru this we come to know of existing algorithms of mining.
10	Integrating Classificatio n and Association Rule Mining 1998	Bing Liu1, Wynne Hsu 2, Yiming Ma	Appeared in KDD- 98, New York, Aug 27-31, 1998	Classification rule mining aims to discover a small set of rules in the database that forms an accurate classifier. Association rule mining finds all the rules existing in the database that satisfy some minimum support and minimum confidence constraints. For association rule mining, the target of discovery is not pre-determined, while for classification rule mining	This paper proposes a framework to integrate classification and association rule mining. An algorithm is presented to generate all class association rules (CARs) and to build an accurate classifier. The new framework not only gives a new way to construct classifiers, but also helps to solve a number of problems that exist in current classification systems.	The research can be extended to building Of more accurate classifiers by using more sophisticated Techniques and to mine CARs without pre-discretization.

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10				there is one and only one predetermined target. In this paper, we propose to integrate these two mining techniques. The integration is done by focusing on mining a special subset of association rules, called class association rules (CARs).		
11	A Comparative Study of Association Rules Mining Algorithms 2000	Cornelia 1 Robert Győrödi2 . Stefan Holban3	Appeared in IEEE Journal	This paper presents a comparison between classical frequent pattern mining algorithms that use candidate set generation and test and the algorithms without candidate set generation. The compared algorithms are presented together with some experimental data that lead to the final conclusions.	From the experimental data presented it was concluded that the Dyn FPgrowth algorithm behaves better than the FP-growth algorithm. First of all, the FP-growth algorithm needs at most two scans of the database, while the number of database scans for the candidate generation algorithm (Apriori) increases with the dimension of the candidate item sets.	
12	Association Rules Mining Algorithm 1999	Zhihua Xiao1		Many algorithms to mine the association rules are divided into two stages, the first is to find the frequent set; the second is use the frequent set to generate	This algorithm emphasis on the usage of domain knowledge and the preparation of the systematically Using of the association rules.	

12				association rules. This proposal discuss the respective characteristics and .shortcoming of the current algorithms to mine association rules and propose another method to mine faster; unlike the other algorithms,		
13	ASSOCIATI ON RULE MINING IN ECOMMER CE: A SURVEY 2000	Venkateswari S 1	Venkateswari S et al. / International Journal of Engineering Science and Technology (IJEST	Association Rule mining is one of the most popular data mining techniques which can be defined as Extracting the interesting correlation and relation among large volume of transactions. E-commerce applications generate huge amount of operational and behavioral data.	In this paper a survey of association rule mining and frequent item set mining algorithms are presented. How association rule mining can be applied to ecommerce to improve the services of ecommerce enterprises are discussed in detail. The types of e-commerce data and the data collection methods are also discussed.	Applying association rule mining in e-commerce application can unearth the hidden knowledge from these data.
14	Mining Multiple-Level Association Rules in Large Databases 1999	Jiawei Han 1, Yongjian Fu 2,	IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, VOL. 11, NO. 5, SEPTEMBER/OCT OBER 1999	A group of variant algorithms is proposed based on the ways of sharing intermediate results, with the relative performance tested and analyzed.	They have extended the scope of the study of mining association rules from single level to multiple concept levels and studied methods for mining multiplelevel associationrulesfrom large transaction databases.	They also suggested that efficient algorithms can be developed from large databases for the discovery of interesting and strong multiple-level association rules. mining multiple-level correlations in databases is another interesting issue to be Studied in the future.

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15	Interestingness of association rules in data mining: Issues relevant to ecommerce 2005	RAJESH NATARAJA N1 B SHEKAR2	S¯adhan¯a Vol. 30, Parts 2 & 3, April/June 2005, pp. 291–309. © Printed in India	They first examine different approaches to address this problem citing their applicability to e-commerce whenever Appropriate. They then provide a detailed survey of one important approach, namely interestingness measure, and discuss its relevance in e-commerce applications Such as personalization in recommender systems. We conclude by reiterating the importance of postprocessing methods in data mining for effective and efficient deployment of e-commerce solutions	In this paper, they have examined the understandability problem in data mining, and its relevance to ecommerce applications. The genesis of this problem can be traced to the glut of patterns generated by data mining applications. Large numbers of mined patterns render manual inspection impractical and infeasible. In addition, the commonplace and obvious nature of knowledge revealed by most of these patterns necessitates usage of automated methods for selecting the most Interesting, novel, relevant and significant patterns for further action. T They have surveyed some of the available post-processing methods in data mining.	Interestingness is a perceptual concept whose different facets are difficult to capture and operationalise. Some of these facets are yet to be identified. The ensuing discussions identified some research issues relevant to ecommerce applications. Future research pertaining to interestingness and associated methods is expected to Yield results with more complete interestingness characterizations. With large volumes of data, data mining is expected to play a significant role in increasing the effectiveness of ecommerce applications. It is not uncommon to find organizations struggling to make sense of data captured through automated processes. Frameworks and methodologies that aid not only in the selection of relevant and significant patterns but also in their effective and efficient deployment need to be researched as they may help firms in leveraging their information advantage

Steps involved in conducting an experimental study

- Identify and define the problem.
- Formulate hypotheses and deduce their consequences.
- Construct an experimental design that represents all the elements, conditions, and relations of the consequences.
    1. Select sample of subjects.
    2. Group or pair subjects.
    3. Identify and control non experimental factors.
    4. Select or construct, and validate instruments to measure outcomes.
    5. Conduct pilot study.
    6. Determine place, time, and duration of the experiment.

Conclusion:

Association rule mining has a wide range of applicability such market basket analysis, medical diagnosis/ research, Website navigation analysis, homeland security and so

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Network Security Model in Cloud Computing

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Abstract:

We have different service-oriented cloud computing models proposed such as infrastructure as a Service(Iaas), Platform as a Service (PaaS), and Software as a Service (SaaS). In all of these models data security and privacy is of high concern. Many of us outsourced data on these models. There is need for access control of outsourced data in cloud computing; however, most of them suffer from inflexibility in implementing complex access control policies. Here in this paper network security is attempted to be implemented using modern encryption techniques. Reliability is high concern for cloud users which is not possible alone by single sign on methods and implementing firewalls. What we require is flexible, fined grained access control in Cloud Computing.

Key Words: *access control, flexibility, scalability, encryption.*

Introduction:

Cloud computing is a new paradigm that builds a virtualization, parallel and distributed computing, utility computing and service oriented architecture. Now days cloud computing is emerged service, that provides lot of benefits including the cost and capital expenditures, increased operational efficiencies, scalability and flexibility so on. Different cloud computing service providers provide the service oriented services such as Infrastructure as a service (IaaS), Platform as a service (PaaS) and Software as a Service (SaaS). Based on this services IT industry will get fine state of infrastructure on the hardware/software and maintenances should be very easy. They save the cost on the Infrastructure and human resources.

Although the great benefits brought by cloud computing paradigm are exciting for IT companies, academic researchers, and potential cloud users, security problems in cloud computing become serious obstacles which, without being appropriately addressed, will prevent cloud computing extensive applications and usage in the future. One of the prominent security concerns is data security and privacy in cloud computing is due to its Internet-based data storage and management.

The benefits of cloud computing will get lot of works from those work we considered a major problem is the security for the cloud data from users access limits and authorization service. The major constriction of our work will provide securable and with specific access control along with authentication and maintain the data security. To provide the data security there several works available, those works

 ISBN: 978-81-910118-7-6

will be majorly on attribute based encryption and access control solutions.Here we are making an attempt to implement a network security model proposedas the Hierarchy Attribute Set Based Encryption (HASBE).it is expected that the HASBE network security model will prove highly scalable, flexible and fine grade in access control.

Literature Review and Related Work:

To provide the security and better access control we have several existing works available, those work will be major constrain on two process, those are Attribute Based Encryption (ABE) and Access Control Solutions.

Attribute Based Encryption:

The Attribute Based Encryption method will propose by Sahai and Waters [1], a new method fuzzy identification based encryption. The draw backs of this scheme are lack of threshold semantics. The ABE scheme ciphertexts are not encrypted to one particular user as traditional public keys cryptography and user capable to decrypt the decryption key and cipher text key while matching the values. The ABE scheme will classified as the Key Policy Attribute Based Encryption (KP-ABE) and Cipher text Policy Attribute Based Encryption (CP-ABE).

KP-ABE [2], cipher texts is associated with a set of attributes and user's decryption key is associated with a monotonic tree access structure. Only if the attributes associated with the cipher texts satisfy the tree access structure, can the user decrypt the cipher texts.

CP-ABE scheme [3], the roles of cipher texts and decryption keys are switched, the cipher texts is encrypted with a tree access policy chosen by an encryptor, while the corresponding decryption key is created with respect to a set of attributes. As long as the set of attributes associated with a decryption key satisfies the tree access policy associated with a given cipher text, the key can be used to decrypt the cipher text.

Bobba et al [6] introduces cipher text policy attribute based encryption to organize the user attributes into a recursive set structure. The drawback of this approach it will hold the private key and not able to combine the attributes sets.

Access Control Solutions:

Yu et al [4] proposed access control scheme based on the KP-ABE, this approach is fine- gradient for the access control and scalable. In this approach use they specific symmetric data encryption key(DEK), this DEK will access generatea public key corresponding the KP- ABE, the key is generated according to structure of access. The files to upload the cloud with the encrypted format anddata userwill decrypt the file use DEK. The draw backs of this approach are encryptor will not able to decide who can decrypt the file.

Wang et al [5] proposed Hierarchical Attributed Based Encryption (HABE) to achieve the fine-grained access control in cloud storage by services combining HIBE and CP-ABE. The problem in this scheme is the same attribute may be administrated by multiple domain masters according

to specific policies, which is difficult to implement in practice. Furthermore, compared with ASBE, this scheme cannot support compound attributes efficiently and does not support multiple values assignments.

Analysis of Problem:

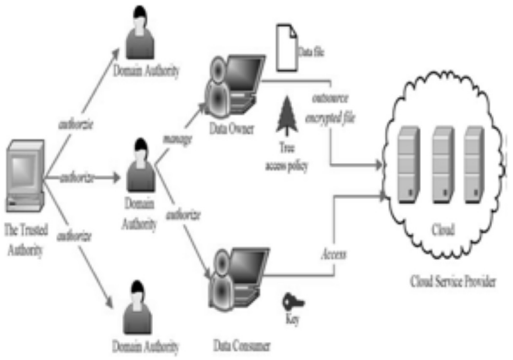

Figure 1: System Model

As shown in System Model Figure I, The computation complexity for each system operation in our scheme is as follows.

System Setup:

The System Setup calls the trusted authority, select the domain authority and generate the random number. To generate random number we apply several computational, the time complicity of system set up is O(1).

Top – Level Domain Authority Grant:

This operation will do by trusted authority to generate the master key for the domain authority.

MKi =(A, D, Dij, D$_{ii}$, for all aij belongs to A, Ei for Ai belongs to A). The time complexity of the this process is O(2N+M).

New User/Domain Authority Grant:

This operation will create a new user or domain authority along with the attribute sets. These operations do by the trusted authority. The time complexity of the process is O(2N+M), where N is the number of attributes in the set of the new user or domain authority, and M is the number of sets in A.

New File Creation:

This operation does by the data owner; to do this work we need the DEK to encrypt the file. The time complexity of this process is O(2|Y|+|X|) where Y denotes the leaf nodes and X denotes the translating nodes in tree access structure.

User Revocation:

This operation will do by the domain authority to maintain the user keys and encrypt the data files. The time complexity of this process is O(1).

File Access:

This operation will do by the data consumer and this will test for the decryption algorithm process. The decryption process will impact on the scalability.

File Deletion:

This operation will do by the cloud provider based on the data owner's request. The time complexity of this process isO(1).

System Analysis

Cloud computing is a new paradigm that builds a virtualization, parallel and distributed computing, utility computing

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and service oriented architecture. Now days cloud computing is emerged service, the cloud computing providing lot of benefits include the cost and capital expenditures, increased operational efficiencies, scalability and flexibility so on. Differ from the cloud computing provide the service oriented services such as Infrastructure as a service (IaaS), Platform as a service (PaaS) and Software as a Service (SaaS). Based on this services IT industry will get fine state on the hardware/software maintenances should be very easy to state. They save the cost on the Infrastructure and human resources.

Although the great benefits brought by cloud computing paradigm are exciting for IT companies, academic researchers, and potential cloud users, security problems in cloud computing become serious obstacles which, without being appropriately addressed, will prevent cloud computing extensive applications and usage in the future. One of the prominent security concerns is data security and privacy in cloud computing due to its Internet- based data storage and management.

The benefits of cloud computing will get lot of works from those work we considered a major problem is the security for the cloud data from users access limits and authorization service. The major constriction of our work will provide securable and with specific access control along with authentication and maintain the data security. To provide the data security there several works available, those works will be majorly on attribute based encryption and access control solutions. Here we propose the Hierarchy Attribute Set Based Encryption (HASBE). The HASBE will prove high scalable, flexible and fine grade in access control.

A. Existing System

The major problem in the clod computing is sharing the resources to all service requester either the requester should be same trusted authority or some other trusted authority, the second problem is providing data effectively when the service requested for the resources on the domain authority, third problem is providing security for the sensitive data from the third party vendors access limitations. To resolve these problems some existing schemes are available those details will observe on the following section.

B. Access control

Access control is security constrain based on this model several models available, the most effective two techniques are Bell-La Padila and BiBa, this techniques are flexible and fine grained access control. Some other approaches on access control are Principal of Policy in Secure group, Methods and limitations of security policy reconciliation etc. Unfortunately, these schemes are only applicable to systems in which data owners and the service providers are with in the same trusted domain.

C. Attribute Based Encryption

Attribute based Encryption is technique to resolve the problem of the access control

process, on this approach we have some existing systems those are Attribute based encryption for fine grained access control of encrypted data and Achieving secure, scalable, and fine grained data access control in cloud computing. This scheme falls short of flexibility in attribute management and lacks scalability in dealing with multiple-levels of attribute authorities.

D. Proposed System

To resolve the problems of existing work we propose a new approach is Hierarchy Attribute Set Based Encryption (HASBE), this approach is extension work for the Ciphertexts – Policy Attribute Set Based Encryption (CP-ASBE or ASBE). The propose work will solve the problems of access control and scalable. This work will majorly process access control system using the following parameters; they are cloud services provider, data owners, data consumers, domain authorities and trusted authority.

- The cloud service provider manages the cloud as the private data storage service.
- Data owners encrypt the files and store them in the cloud for sharing with data consumers.
- Data consumers access the files and download the encrypted files and decrypt the files. The Data owner/ consumer will administrated by the domain authority.
- The trusted authority is the root authority and responsible for manage the domain authorities.

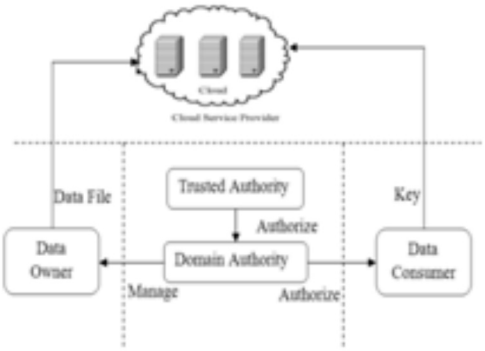

Figure 2: System Architecture for HASBE

1. Trusted Authority
2. Domain Authority
3. Data Owner
4. Data Consumer
5. Cloud Service Provider

1. Trusted Authority

The Trusted Authority is responsible to system set up, top level domain authority grant; create domain authority and key update. The system set up process to create the public key and master key with considering the attribute sets range i.e depth, the hierarchy of domain services. The trusted authority create the domain with the unique id, before assign the unique to a domain it will check is valid domain or not if valid domain it will call the create domain authority function. The create domain authority function will give the unique id to create domain. Then the domain authority will able to create the sub domain and the users.

2. Domain Authority

The Domain Authority will able the create the new domain authority and

 ISBN: 978-81-910118-7-6

new users, the domain authority created domains will be considering the sub domain authority, these domains authority will give the depth of the access tree structures, The each domain authority also able to create users, the user should a data owner or data consumer. To create the users it will having the functions create user. The domain authority is also able to remove the users.

3. Data Owner

The data owner able to create file, encrypt file, re-encrypt file, file deletion permissions. The data owner to create a file, accept a unique id to the file and by using the encryption process encrypt the file and make tree structure access and store in the cloud. The data owner want to re encrypt file, it's possible with the accessing the file with the unique id and tree structure format. The data owner will also able to delete the file.

4. Data Consumer

The data consumer will created by the domain authority, data consumer is able to access the cloud data by data owners provide, to access the data they need a key to access the file on the cloud, the key is provided by the domain authority. To get that key the data consumer needs to send the request to the domain authority, the domain authority checks the permissions then provide key. The key will contain the information of the file and decryption key value and access structure of the file. The data consumer will access the file by using the tree structure and unique id, and the data should read the file decrypt the file with the references of the decryption key.

5. Cloud Service Provider

The cloud service provider manages a cloud to provide the data storage services.

System Design:

1. Introduction

This chapter describes the system designs in the form system architecture, modules, usecase diagram. It also explain the software and hardware requirement to perform the system execution.

Use Case Diagrams:

A use case describes a system's behavior as it responds to a request that originates from outside of that system. In other words, a use case describes "who" can do "what" with the system in question. The use case technique is used to capture a system's behavioral requirements by detailing scenario driven threads through the function requirements. A defined purposeful, interaction between a system and a human of non human actor that is playing a specify role outside the system.

Use Case Diagram for Trusted Authority

The figure 3 represents use case diagram for trusted authority. The Trusted Authority is responsible to system set up, top level domain authority grant; create domain authority and key update. The system set up process to create the public key and master key with considering the attribute sets range i.e depth, the hierarchy of domain services. The trusted authority create the domain with the unique id, before assign the unique to a domain it will

check is valid domain or not if valid domain it will call the create domain authority function. The create domain authority function will give the unique id to create domain. Then the domain authority will able to create the sub domain and the users. The HASBE approach will process the domain authority keys will be assign the some time expire, when the time is expires the top level domain authority will update the domain authority keys and in valid domains should be deleted.

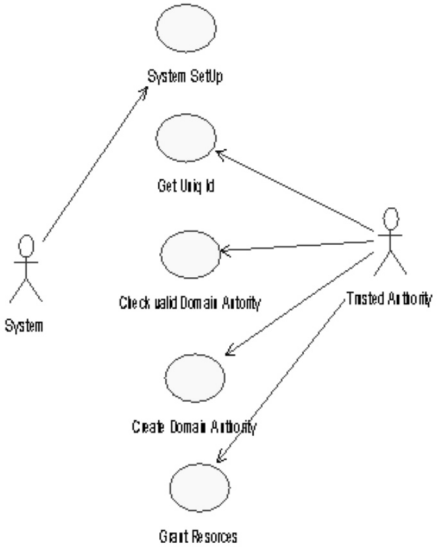

Figure 3 Use Case Diagrams for Trusted Authority

Use Case Diagram for Domain Authority

The figure 4 represents use case diagram for domain authority. The Domain Authority will able the create the new domain authority and new users, the domain authority created domains will be considering the sub domain authority, these domains authority will give the depth of the access tree structures, The each domain authority also able to create users, the user should a data owner or data consumer. To create the users it will having the functions create user. The domain authority is also able to remove the users.

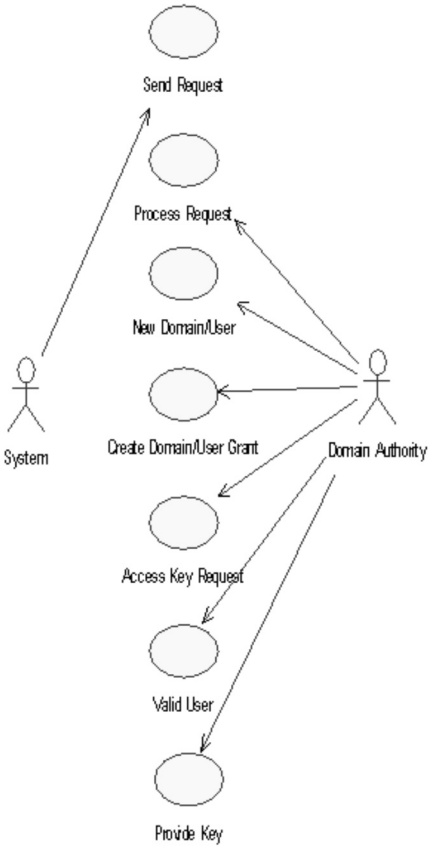

Figure 4 Use Case Diagrams for Domain Authority

Use Case Diagram for Data Owner

The figure 5 represents for use case diagram for data owner. The data owner able to create file, encrypt file, re-encrypt file, file deletion permissions. The data owner to create a file, accept a unique id to

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the file and by using the encryption process encrypt the file and make tree structure access and store in the cloud. The data owner want to re encrypt file, it's possible with the accessing the file with the unique id and tree structure format. The data owner will also able to delete the file.

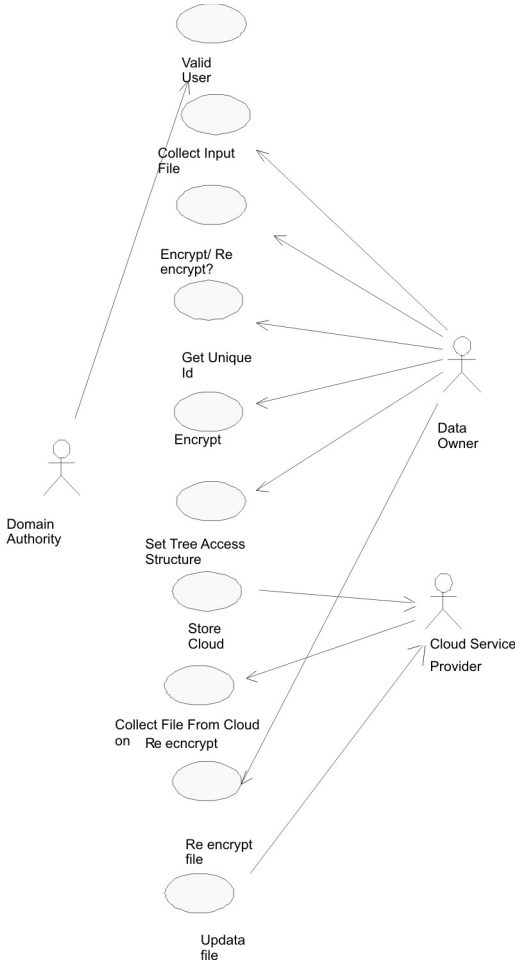

Figure 5 Use Case Diagrams for Data Owner

Use Case Diagram for Data Consumer

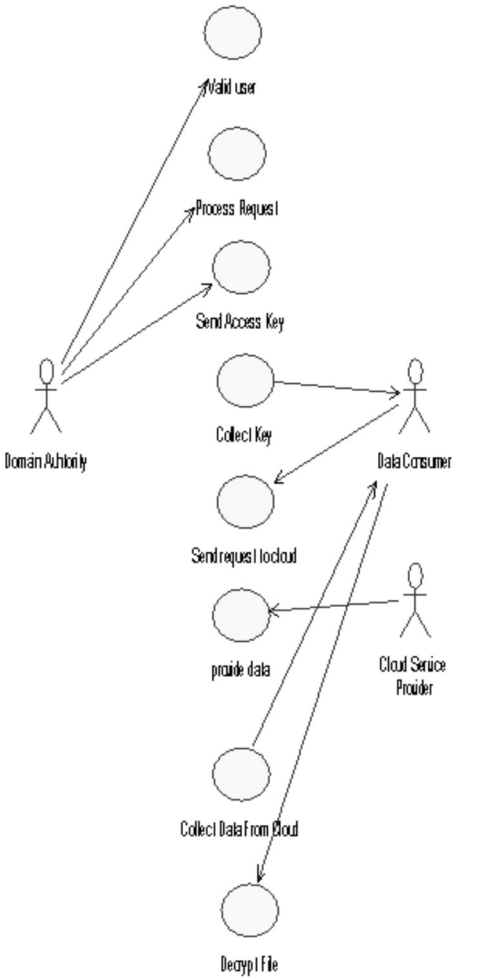

Figure 6 Use Case Diagrams for Data Consumer

The figure 6 represents use case diagram for data consumer. The data consumer will created by the domain authority, data consumer is able to access the cloud data by data owners provide, to access the data they need a key to access the file on the cloud, the key is provided by the domain authority. To get that key the data consumer needs to send the request to

the domain authority, the domain authority checks the permissions then provide key. The key will contain the information of the file and decryption key value and access structure of the file. The data consumer will access the file by using the tree structure and unique id, and the data should read the file decrypt the file with the references of the decryption key.

Hardware and Software Requirements For Network Security Model.

1. Hardware Specifications

The hardware used for the development of the project is:

Processor : Pentium IV

Ram : 1 GB

Hard Disk : 80GB

2. Software Specifications

The software used for the development of the project is:

Operating Systems : WIndows XP/2007

Web Server : Tomcat

Languages : JAVA, JSP, Servlets,

Java-cryptography API

Database : MS-SQL Server 2000

Conclusion

This paper has focused on implementation of Network Security model for cloud computing using Hierarchical Attribute set based encryption technique which is considered to be scalable, flexible and role-based in multiple domains access control.

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HASBE: A Hierarchical Attribute-Based Solutionfor Flexible and Scalable Access Controlin Cloud Computing Zhiguo Wan, Jun'e Liu, and Robert H. Deng, Senior Member, IEEE.

ISBN: 978-81-910118-7-6

World Class Manufacturing: Literature Review and Findings

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Abstract:

Purpose – The purpose of this paper is to review the literature on World Class Manufacturing (WCM) and to present an overview of WPM implementation practices adopted by the manufacturing organizations.

Approach – The paper systematically categorizes the published literature and then analyzes and reviews it methodically.

Findings – The paper reveals the important issues in World Class Manufacturing ranging from concept, nature, evolution, to the latest techniques used. It brings to the notice the fact that WCM does not refer to a single method, but is a collection of tools and techniques. No single best practice framework exists for the implementation of World Class Manufacturing principles. It is made up of a number of tools, few of which are briefly studied here, namely Kaizen, Total Productive Maintenance (TPM), Quality Circles and Six Sigma.

Practical implications – The literature on World Class Manufacturing has so far been very limited. The paper reviews number of papers in this field and presents the overview of various WCM implementation practices demonstrated by manufacturing organizations globally. It also highlights the approaches suggested by various researchers and practitioners.

Key Words: *World Class Manufacturing, Total Productive Maintenance (TPM), Six Sigma, Kaizen, Quality Circles*

Today's dynamic and turbulent business environment has shifted the focus of the organizations from "Quality" to "Competitive quality". With ever changing customer requirements, quality is no more a competitive weapon. Every organization has quality today.

What separates a world class organization from others is - how better you are from the rest of your competitors. World Class Manufacturers are those that demonstrate industry best practice. To achieve this, companies should attempt to be best in the field at each of the competitive priorities - quality, price, delivery speed, delivery reliability, flexibility and innovation. Organizations should therefore aim to maximize performance in these areas in order to maximize competitiveness.

However, as resources are unlikely to allow improvement in all areas, organizations should concentrate on maintaining performance in 'qualifying' factors and improving 'competitive edge' factors. The priorities will change over time and must therefore be reviewed. World Class Manufacturing (WCM) means being successful in your chosen market against any competition—regardless of size, country of origin or resources.

 ISBN: 978-81-910118-7-6

Introduction and Implementation of WCM:

The goals of WCM efforts include maintaining market share, improving profitability and improving the firm‘s ability to compete in a global market place.

WCM Frameworks:

1. Halls Framework of Value Added Engineering
2. Schonerger‘s Framework of World-Class Manufacturing
3. Gunn‘s Model of World-Class Manufacturing
4. Maskell‘s Model of World-Class manufacturing
5. America‘s Best Plants Model of World-Class manufacturing

Halls Framework of Value Added Engineering

According to Hall (1987), manufacturing excellence is attained by ‘value added manufacturing‘ which is based on the principle that eliminate anything that does not add value to the product or service, whether material, equipment, space, time, energy, systems or human activity of any sort. Already suggested by Shigeo(1981) as seven wastes in manufacturing, where waste is anything that does not add any value to the product or service. These seven wastes and their methods of elimination are taken care of in Just-in-Time (JIT). This framework is described in three overlaying categories of work:

- Total Quality,
- JIT Manufacturing and
- People Involvement.

Schonberger’s Framework:

Propogated by Schonberger(1986), the goal of world class manufacturing is continual and rapid improvement. He coined the term “World Class Manufacturing” to cover the many techniques and technologies designed to enable a company to match its best competitors. World class status can be achieved by any of the parallel paths:

- The quality path: do it right the first time
- The JIT production path: smaller the lot, better it is.

In Schonberger‘s opinion, if the WCM effort fails to make it easier for marketing to sell the product, then something is wrong. He advocates cellular manufacturing, deviation reduction and variability reduction.

Gunn’s Model of World-Class Manufacturing:

Gunn(1987) propagated that world class manufacturing rests on 3 pillars:

- Computer Integrated Manufacturing
- Total Quality Control
- JIT Manufacturing

All the three must be addressed simultaneously in order to gain competitive advantage in manufacturing.

Maskell’s Model of World-Class manufacturing

According to Maskell (1991), world class manufacturing includes

- A new approach to product quality
  - Zero defect
  - Total Quality Control
- JIT Production Techniques
  - No Inventory
- Change in the way the work force is managed
  - transferring responsibility
  - education & cross training
  - problem solving & quality circles
- Flexible approach to customer requirement
  - production flexibility
  - design flexibility

America's Best Plants Model of World-Class Manufacturing:

Characteristics of world class manufacturing identified by three core strategies

- customer focus
- quality
- agility : ability to quickly, efficiently & effectively respond to change

Six supporting competencies help the plants achieve the goals defined in the three core strategies

- employee involvement
- supply management
- technology
- product development
- environmental responsibility & safety
- corporate citizenship

America's best plant model views quality as defect free, waste free workmanship that derives from product & process quality.

Literature on the performance measures of World Class Manufacturing is very limited. The only reason for this could be the fact that no single best practice framework exist for the implementation of World Class Manufacturing principles, as each framework will necessitate the creation of different performance measures. The only common factors that could be identified from the literature are cost, quality, and reliability/throughput (Figure 1: Performance Measures of World Class Manufacturing).

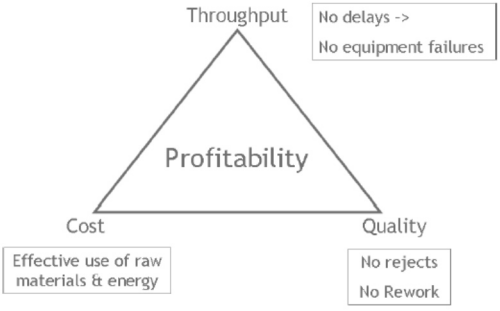

Figure 1: Performance Measures of World Class Manufacturing

Source: ArcelorMittal South Africa, 2008

The main aim of World Class Manufacturing is the pursuit of maximum efficiency for the production system in order to maximize the organization's profitability. Figure 2 gives effects of continuous improvement with world class manufacturing.

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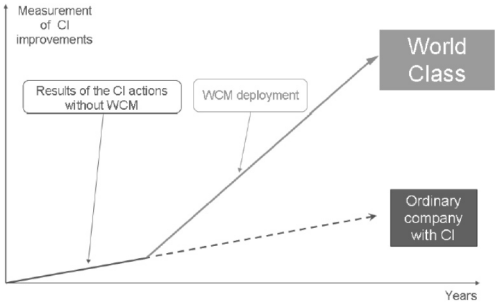
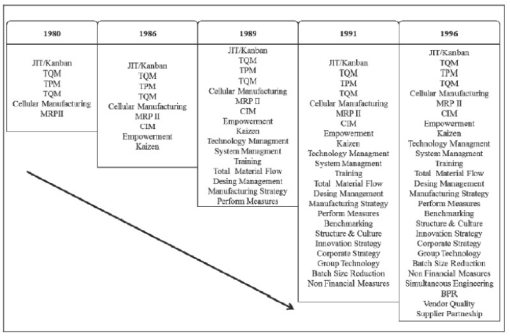


Figure 2: Effects of Continuous Improvement with World Class Manufacturing

Source: ArcelorMittal South Africa, 2008

There are four basic motivators why a company would want to implement World Class Manufacturing. Firstly, due to the fact that the economic environment has become more severe and the company wants to focus on the reduction of cost by eliminating failures/disturbances in the production process. Secondly, customer requirements for the quality of products have increased and the company wants to pursue zero defects for products and services. Thirdly, customers start demand stricter adherence to and shortening of deadlines and the company wants to increase throughput in the pursuit of just-in-time delivery. Lastly, the need for improved working conditions have increased and the company wants to eliminate dangerous and/or unhealthy work and work conditions.

World class can be defined as a tool used to search and allow a company to perform at a best-on-class level. When applied to the manufacturing field, TQM and WCM are synonymous. Fabio De Felice, Antonella Petrillo and Stanislao Monfreda (2013) present establishments of the basic model of World Class Manufacturing (WCM) - quality management for the production system in the automotive industry in order to make products of the highest quality eliminating losses in all the factory fields and improvement of work standards.



The growth of techniques associated with the WCM concept

Source : Fabio De Felice, Antonella Petrillo and Stanislao Monfreda

To beat out the turbulent, complex and even chaotic market, the manufacturing companies need to adopt world class manufacturing philosophies, principles and practices to achieve a competitive edge at the pipeline of competitive priorities of quality, cost, price, delivery speed, delivery reliability, innovation, flexibility etc. T. K. Murugesan, B. Senthil Kumar, M. Saravana Kumar (2012) study what world class manufacturing means and how far manufacturing companies in South India are striving to come towards achieving that accreditation. This study also revealed that the WCM practices and lean initiatives adopted by South Indian manufacturers have a strong significant positive influence on the achievement of competitive advantage in their business operations.

As per World Economic Forum's Global Competitiveness Report 2012-13, large emerging economies such as Brazil, the Russian Federation, India, China, and South Africa are growing somewhat less than they did in 2011. India is ranked at 56th position out of 141 countries. In 1994 we were at 35th position. India's decline in competitiveness is shocking. This explains that we have to go far for achieving the better positions.

The said report gives twelve pillars of competitiveness and the many determinants that drive productivity and competitiveness.

Higher education and training - Quality higher education and training is particularly crucial for economies that want to move up the value chain beyond simple production processes and products. In particular, today's globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the economy.

Technological Readiness - The technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICT) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness. ICT has evolved into the "general purpose technology" of our time given the critical spillovers to the other economic sectors and their role as industry-wide enabling infrastructure. Therefore ICT access and usage are key enablers of countries' overall technological readiness.

Labor market efficiency - The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs. Labor markets must therefore have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption We have ample availability of cheap labor but according to Chandra "Experience, market share and technology innovations are greater determinants of cost leadership than the cheap labor (Chandra and Shukla 1994). Superior product quality, design innovations, robust delivery performance, customization and excellent after sales service are the distinctive manufacturing characteristics needed to gain competitive advantage.

In new millennium, the increased level of globalization and competition is forcing the Indian firms to gain competitiveness, this improved competitiveness' in its broadest context is referred as manufacturing excellence. If a firm continues to excel in manufacturing, it may dominate world markets, in which case it would be called a "World-Class Manufacturer". Economic activity today is becoming globalised more significantly. To compete successfully with World-Class Manufacturers in this dynamically changing environment, firms must adopt World-Class Manufacturing Practices. Maskell states that World-Class manufacturing is a very broad term which

 ISBN: 978-81-910118-7-6

generally includes focus on product quality, JIT Production techniques, workforce management and agility in meeting customer requirements. Sayed Mudassar Nazir(2012) presents a descriptive effort to review the concept of World-Class Manufacturing. There are 3 principles behind World Class Manufacturing -

- The first is what is known as Just in Time or Lean Manufacturing, the step by step elimination of waste. Waste in this sense is defined as any activity that adds cost but not value to the end product such as excess production, stock, idle work in progress, unnecessary movement and scrap.
- The second is Total quality, a culture of intolerance to defects both in the processes and also information such as bills of material and stock records. Total quality is often these days called Six Sigma which uses total quality and lean manufacturing techniques to attempt to reduce rejects to 3.4 per million parts produced.
- The final principle is the principle of Total Preventative Maintenance where, whenever practical, a preventative maintenance program means that unplanned stoppages due to equipment failure are minimized.

A study of the literature on World Class Manufacturing reveals that it is a very loosely defined principle, with no single best practice framework. The first to coin the phrase was Hayes and Wheelwright (1984) to describe organizations that have achieved a global competitive advantage through the use of their manufacturing capabilities as a strategic weapon. According to Jan Hendrik Phillipus Mey (2011), world class manufacturing is described as a collective term for a number of production processes and organizational strategies which all have flexibility as their primary concern.

There are a number of process improvement methodologies that can be applied in business. However, the leadership of organizations seems to favour the adoption of a methodology with which they are familiar. It is then assumed that if a specific methodology is used business problems experienced would be solved. Kem Ramdass, Leon Pretorius (2008) compare four improvement strategies- Six Sigma, Lean Manufacturing, Theory of Constraints (TOC) and Work Study.

The study of world-class manufacturing (WCM) has evolved, reflecting an increasing scope. Early researchers proposed fundamental areas of WCM that have been augmented and refined (Hayes and Wheelwright, 1984; Giffi et al., 1990; Schonberger, 1986, 1990, 1996). The study by Ram Narasimhan, Morgan Swink (2001) continues this trend in investigating WCM practices by broadening the perspective further to include supply chain considerations. There are a number of other studies that have examined salient aspects of world-class manufacturing within the context of operations strategy.

B.Mahadevan (1998) seeks to bring out the contrast between the traditional and the new ideals of manufacturing that seem to be responsible for the differences in the performances of the two systems.

This paper also examines carefully the likely fall out of these developments on the cost management profession. The paper highlights the common characteristics of WCM as given by Schonberger – Just in Time (JIT), Total Quality Management (TQM), Total Productive Maintenance (TPM), Employee Involvement and Simplicity.

World-Class Manufacturing (WCM) has received growing attention in the past several years. There are many concepts and techniques which comprise WCM. But how is a firm to prioritize among all the elements of WCM and find those which are most relevant to the firm's competitive situation. One answer is provided by the methodology described by Warren H. Hausman, David B. Montgomery (1997) is - Making Manufacturing Market Driven.

The importance of the overview of earlier management theory and thought is the recognition of scholars contributions and impacts on modern managerial practices. Dynamic global world-class manufacturing techniques is one of the most talked about manufacturing management approaches and will be a major management focus and trend in the 21s century. The concept of global world-class manufacturing has become the single most motivating theory in many major industries for world market through input-output(I-O) framework. Dynamic global WCM is a management philosophy that emphasizes the need to meet external and internal customers needs and expectations and the importance of doing things right for world market. Hassan Farsijani (1996) state that the reliability of items, products and facilities is an important consideration of design by I-O techniques. Global WCM techniques are a competitive strategy involving continuous improvement of products, processes and services to improve quality, reduce costs, increase productivity and increase total customer satisfaction.

SK Jetley and J Catalano (1993) report on the challenge to American industry from overseas competition, particularly from Japan. The basic elements and philosophies of world class manufacturing (WCM) are discussed. The tools of WMC are described.

Following is the literature review of few tools of WCM namely: Kaizen, TPM, Quality Circles and Six Sigma.

Kaizen as a WCM tool:

Adam Paul Brunet and Steve (2003) study Kaizen as practiced in a selection of Japanese companies. It discusses the general understanding of Kaizen and proposes a clear definition. The paper concludes that Kaizen evolves uniquely within each organization, following changes to the organization's business environment.

Adedeji Adeyemi Charles, Okolie Kevin Chucks, evaluate the extent to which functional and organizational measures influence employee's participation in suggestion of ideas for continuous improvement in South African Automotive companies. The study has established a basic level of awareness and understanding of Kaizen is a vital tool for delivering strategic objectives in the management of decision making and organization growth.

 ISBN: 978-81-910118-7-6

TPM as a WCM tool:

Focused (Continuous) improvement is an essential requirement for sustaining and gaining a competitive advantage for the organizations. A successful continuous improvement program is one where in the operational defects are eliminated at the root cause level and are prevented from reoccurring. According to Anil S. Badiger, R. Gandhinathan, V.N.Gaitonde, Rajesh S. Jangaler (2003), TPM methodology is a proven approach to increase overall equipment effectiveness (OEE) of equipment.

H. Yamashina, (2000) deals with the basic requirements for world-class manufacturing and discusses the role of total productive maintenance (TPM) in helping to achieve world-class manufacturing. Examines the roles of TPM in TQM and JIT. Finally, impacts of TPM on the culture and structure of the organization are discussed and pitfalls of TPM implementation are dealt with. Provides an in-depth look

at the development of Japanese manufacturing strategy and concludes with the view that the first step to world-class manufacturing is to implement TPM successfully and to create an active organization.

Melesse Workneh Wakjira, Ajit Pal singh (2012) This paper evaluates the contributions of TPM initiatives towards improving manufacturing performance in Ethiopian malt manufacturing industry. The correlations between various TPM implementation dimensions and manufacturing performance improvements have been evaluated and validated.

Quality Circle as a WCM tool:

Vishal V.Gaikwad, Anita V.Gaikwad (2009) have studied the role of quality circle as a management tool to enhance the effectiveness of library services. It argues that the concept encourages employee participation as well as promotes teamwork and motivates people to contribute towards organizational effectiveness through group processes.

Quality circle provides the employees at the bottom level to proceed towards the top level with opportunities to perform effectively and solving the daily problem of the unit. F. Talib and M. Ali (2003), tried to study the impact of quality circle techniques through a case study dealing with causes of the material losses related to 4-Ms (man, machine, materials, methods), in a small production shop floor. The observed data are analyzed through Pareto diagram and ‘Ishikawa diagram‘ and following results were obtained : Drastic reduction in materials wastage, average saving per year increased and financial losses were minimized, workers were motivated to keep and operate materials with care and prevent wastage, and good team relationship was built among the workman and management.

Six Sigma as a WCM tool:

Nowadays most of the organisations are showing keen interest in using Six Sigma approach to improve their operations performance. Motorola coined the concept of Six Sigma and General Electric popularised

it. Melesse Workneh Wakjira, Ajit Pal singh (2010) conducted case study at bearing manufacturing facility located at Hyderabad. Various statistical tools and techniques were employed in this study to improve the operations

Six Sigma has been gaining momentum in industry; however, academics have conducted little research on this emerging phenomenon. Understanding Six Sigma first requires providing a conceptual definition and identifying an underlying theory. Roger G.Shroeder, Kevin Linderman, Charles Liedtke, Adrian S. Choo (2007), use the grounded theory approach and the scant literature available to propose an initial definition and theory of Six Sigma. Their research argues that although the tools and techniques in Six

Sigma are strikingly similar to prior approaches to quality management, it provides an organizational structure not previously seen. This emergent structure for quality management helps organizations more rigorously control process improvement activities, while at the same time creating a context that enables problem exploration between disparate organizational members. Although Six Sigma provides benefits over prior approaches to quality management, it also creates new challenges for researchers and practitioners.

Conclusions:

Since Hayes and Wheelwright(1985) and Schonberger's(1986) seminal work, a number of authors have expanded and tested their definitions. For example, Gunn (1987) provides a strong emphasis on the role of technology in world-class manufacturing, while Hall (1983) stresses that world-class manufacturing is a fundamentally different way of operating an organization, rather than a set of techniques. The literature surveyed gives us insight into the approaches of different authors regarding the focus of world-class manufacturing. It can be concluded that being 'world class' means anything that makes us better than our competitors and keeps the customers happy. A common theme in these studies is the importance of a supporting infrastructure for quality management, a key element of world-class manufacturing.

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Numerical Investigation of the Swirl Flow-Field Characteristics of an Aero Gas Turbine Annular Combustor

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Abstract:

In the present study the Gas turbine combustor flow through the swirler has been carried out by using CFD tool – Fluent. The swirler has been modeled by CAD modeling software like CATIA V5R15. The flow models are extracted from the generated geometric model and are discretized using meshing tool like Hypermesh. The discretized models are solved by applying boundary conditions using commercial code FLUENT, the mass flow through the swirler have been computed. These results are compared with the experimental data obtained by Swirler Test Rig in Gas Turbine Research Establishment (GTRE), Bangalore. Both have been compared the computed values in good agreement with the experimental data.

Introduction:

Gas Turbine Combustor:

A Gas Turbine Combustor is designed to burn a fuel-air mixture and to deliver combusted gases to the turbine at a temperature not exceeding the allowable limit at the turbine inlet. The fuel-air mixture has a ratio of l5 parts air to 1 part fuel by weight. 75 percent of the compressed air is used to form an air blanket around the burning gases and to dilute the temperature, which may reach as high as 2300º C (Flame temperature), to approximately 1450º C. This ensures that the turbine section will not be destroyed by excessive heat. Combustion is continuous and self-supporting.

Parts of Combustor:

Diffuser: The purpose of the inlet diffuser is to reduce the mean velocity of the air delivered from the compressor and provided to the combustion chamber as a uniform flow field, recovering as much as the dynamic pressure as possible. Generally compressor discharge air velocity ranges from 90-180 m/sec. Before this high velocity air is allowed to enter the combustion chamber it must be diffused to levels consistent with low pressure loss, high efficiency requirements of contemporary combustors. An ideal diffuser is one that achieves the required velocity reductions in the shortest possible length with minimum total pressure loss, uniform and stable flow conditions and stable combustion at its outlet.

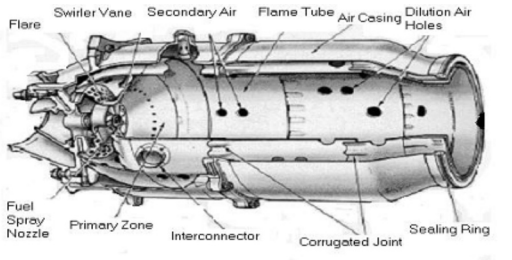

Figure 1: Parts of a typical Combustor

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Swirler: It is located at the entrance of the liner. The function of the swirler is to provide a swirling motion to the air coming out of the diffuser. Here the axial velocity is converted to circumferential velocity.

Swirling action is essential in order to mix the air and the injected fuel thoroughly i.e. to obtain improved turbulence, as to ensure the complete combustion of fuel and thereby increasing the thermal efficiency. There are several factors influencing the size of the recirculation zone downstream of the swirler. The size of the recirculation zone is increased by an increase in vane angle, an increase in the number of vanes i.e. a decrease in vane aspect ratio and changing from the flat to curved vane. The amount of rotation imparted to axial flow is given by the non-dimensional number i.e. Swirl Number (Sn). For values of Sn less than around 0.4, no flow recirculation is obtained and swirl is weak. When streamlines diverge, swirl is moderate. This region correspond to Sn between 0.4 - 0.6. If Sn=0.6 it is a strong swirl and most of the swirlers operate in this condition.

Fuel injector: It is used for the purpose of atomization of fuel. Fuel is introduced by various techniques such as pressure atomizing, air blast atomizing, vaporizing and premix /pre-vaporizing. Pressure atomizers are relatively simple in construction, provide a wide flow range and can provide good fuel atomization when fuel system pressures are high. In air blast atomizer by means of gas dynamics shear forces generated by strong swirling motion accompanied by counter swirl, liquid fuel is atomized. In vaporizing technique the fuel and air are introduced into a cone shaped tube immersed in combustion zone. During operation, the heat transfer from the combustion chamber partially vaporizes the incoming fuel, while the liquid / vapor fuel within the tube provides thermal protection for the tube. In premixing technique, fuel is introduced and premixed with the incoming air prior to the introduction into the combustion zone. This provides a uniform, fully mixed field of vaporized fuel in the combustion region. This results in low smoke and chemical emissions and improves fuel air uniformity in combustion zone.

Spark plug: The function of spark plug or igniter plug is to generate spark for ignition of air fuel mixture. The mode of ignition is by means of electrical discharge such as spark or arc discharge. Spark discharges convert electrical energy fairly efficiently into heat that is concentrated in a relatively small volume.

Liner: The function of the liner or the flame tube is to provide a region of low velocity in which combustion is sustained by a recirculatory flow of burnt products that provide a continuous source of ignition for incoming fuel mixture.

Casing: The casing is the outer container of the combustor. It is the structural shell which carries the thrust loads. In case of an annular combustor, there is a single casing which covers all the flame tubes as opposed to the can type which has individual casing for each of the flame tubes. This type of arrangement in an annular combustor drastically reduces the weight of the engine.

Introduction to the Swirl Flows:

Swirl flows offer an interesting field of study for aerospace and mechanical engineers in general and for combustion engineers in particular since it involves complex interaction of recirculation and turbulent mixing which aid flame stabilization in combustion systems. Swirl flows are generated by the application of a tangential velocity component to circular jets by the use of either Vane Swirlers or Axial plus tangential entry swirl generators or by direct tangential entry in to the chamber. Swirl flows have large-scale effect on flow fields. For reacting flows flame size, shape, stability and combustion intensity are affected by the degree of the swirl imparted to the flow. This degree of the swirl is usually characterized by means of a non-dimensional number called the swirl number Sn., which is defined as the ratio of the axial flux of the swirl momentum (G_ϕ) divided by the axial flux of the axial momentum (Gx) times the nozzle radius.

$$S_n = \frac{G\,\emptyset}{(Gx.R)}$$

Swirl flows occur in a very wide range of applications. In reacting cases, applications include vortex amplifiers and reactors, cyclone separators, vortex shedding from aircraft wings, whirlpools, tornadoes, agricultural spray machines, heat exchangers, jet pumps etc. In combustion systems, the strong and favourable effects of swirl applied to injected air and fuel are extensively used as an aid to stabalise the high intensity combustion process and efficient clean combustion in a variety of practical applications. The applications are numerous; for example, gasoline engines, diesel engines, gas turbines, industrial furnaces, utility boilers and many other practical combustion systems are equipped with swirlers in one way or the other.

Effects of the Swirl Flow:

Swirl flows can be classified into weak, medium and strong swirl based on swirl number 'Sn'. If the swirl number is less than 0.3, it is classified as weak swirl and if it is between 0.3 to 0.6, it is called medium swirl and if the swirl number is greater than 0.6, it is called strong swirl.

The basic effect of the low swirl is to increase the width of a free jet flow; jet growth, entrainment and decay are enhanced progressively as the degree of the swirl is increased. The axial pressure gradient for a weak swirl is very low as per Davis. L.B. and Washam. R.M [7] and hence no recirculation zone is formed. Where as at high degrees of swirl (S > 0.6), when the flow reaches a certain critical Reynolds number, vortex breakdown instability develops. Vortex breakdown is the formation of a free stagnation point and recirculation zone in the vortex core of flows with significant stream wise verticity.

The design aspects of swirlers are covered in detail by several authors, viz Arthur H. Lefebvre (1999) [1], Mongia, H.C (1994), A J. Ward and Smith (1980), Sean D. Bradshaw (2002). These books give an insight not only into the various steps required in design but also provide the procedure and the empirical relations required in the basic design aspects of a swirler.

 ISBN: 978-81-910118-7-6

Lot of numerical and experimental studies were carried out by various researchers to improve the performance and stability of the swirlers. David G. Lilley [2] have done the experimental and theoretical research on two-dimensional axisymmetric geometries under low-speed non reacting, turbulent, swirling flow conditions typical of gas turbine and ramjet combustion chambers. Wang et al. [3] carried out the experimental analysis to know the behavior of droplets and the continuous phase (i.e, gas in the presence of the droplets) downstream of a model gas turbine combustor dome swirl cup characterized via phase Doppler interferometry in the absence of reaction and found that Both the continuous phase and droplets recirculate is correlated with the droplet size & the magnitude of the slip velocity depends on droplet size. David G. Lilley [4] carried out to make time mean velocity measurements as close as possible to the swirler exit, to define more accurately the performance characteristics of the swirler and that the flat axial and swirl profiles with radial velocity equal to zero were found to be progressively less realistic as the swirler blade angle increases. Axial and swirl velocities peak strongly at the outer edges of the swirler exit. M.D Turrell and P.J. Stopford [5] carried out CFD Simulation of the Flow within and Downstream of a High-Swirl Lean Premixed Gas Turbine Combustor.

Swirling flows can exhibit several phenomena that are of interest to combustor and turbine design, e.g., processing wake region, vortex breakdown and sub/super critical vortex cores and their transition. With respect to the combustor exit flows, the characteristics of the vortex core are of most significance. The numerical and analytical studies have employed simplifications, e.g., axi-symmetry, inviscid flow, low Reynolds number and constant density. The high temperatures over the suction surface of the central NGV are due to the pressure of a highly rotating vortex core. High temperatures on the hub platform in the neighbourhood of the trailing edge are due to the migration of the vortex core towards the hub.

Objectives of the paper:

Through this paper an attempt is made to address the following points,

- The object of the paper is to investigate the swirler flow field characteristics of an aero gas turbine annular combustor and to find out the mass flow rate through the swirler.
- To check swirlers for uniformity of airflow, for a given upstream pressure.
- The swirlers are assembled so that airflow can take place only through the vanes i.e, there is no air flow through the central annulus gap and through outer surface and adaptation.

Design Factors Influencing Swirler:

Swirler with air-blast configuration is retained in new design as it is optimized during baseline development stage, with minimum soot and cooler liner without any hot spot. The comparative details of base line swirler and the optimized swirler are given in following Table.

There are several factors influencing the size of the re-circulation zone downstream of the swirler. The size of the re-circulation zone is increased by an increase in vane angle, an increase in the number of vanes i.e., a decrease in the vane aspect ratio and changing from the flat to curved vane.

Description	Baseline Swirler	Optimised Swirler
Swirler Type	Axial	Axial
Vane Type	Straight	Straight
No. of swirler	18	18
No. of vanes/swirler	12	12
Vane Angle	00	500
Vane Thickness (mm)	1	1
Inner Diameter (mm)	33	33
Outer Diameter (mm)	47	40
Indiv. Swirler Area (mm2)	481.42	215.98
Swirler No. Sn	1.02	1.09

The amount of rotation imparted to axial flow is given by the non-dimensional number i.e., Swirl Number (Sn). For vanes of Sn less than around 0.4, no flow re-circulation is obtained and swirl is weak. When streamline diverges, swirl is moderate. The region correspond to Sn between 0.4 - 0.6. If Sn = 0.6, it is a strong swirl and most of the swirlers operate in this condition as per Yang S.L, R.R Tacina [6], [8].

Geometric Model of Swirler & Experimental Set-up And Flow Domain Discretisation

The data for construction of the swirler was taken from GTRE. The dimensions of swirler are

Swirler type	Axial vane type swirler
No. of vanes per swirler	18
Vane angle	50o
Vane Thickness	1 mm
Inner Diameter	33 mm
Outer Diameter	40 mm

The model for swirler and experimental set-up has been modeled by making use of Catia V5R15 by making use of number of commands like extrude, revolve, blend, fill, multi section solids etc in surfacing and later after carefully joining each and every surface it has been converted in to solid. The swirler model is shown in Fig 2, and the Domain of the Experimental set-up is showed in Fig 3.

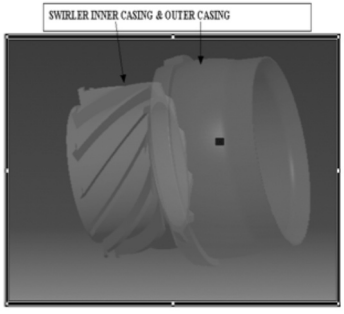

Fig 2: CAD model of Swirler

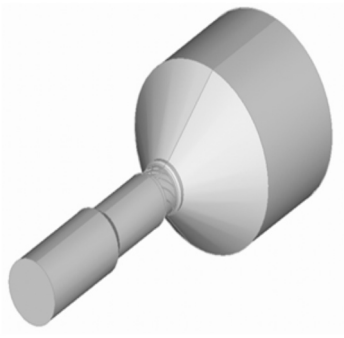

Fig 3: Domain of the experimental set-up

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The model of the Domain of the experimental set-up has been created in the surface modeling with the help of proper dimension. Thereafter the geometry has been converted into IGES format and exported into the meshing software HYPERMESH.

The Fig 4 shows the meshed swirler blade pattern. The flow domain extracted and discretised in HYPERMESH using structured Hex8 elements. The meshed model of the Domain is showed in Fig 5.

Fig 4: Meshed Swirler Blade Pattern

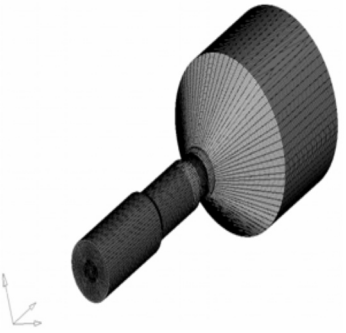

Fig 5: Meshed Model of Domain

Boundary Conditions:

Fig 6 shows the boundary condition as applied to the flow domain. Fluent 6.2, a commercially available 3D viscous code, was selected for the CFD analysis. The boundary conditions were specified as depicted in Fig 6. The pressure inlet as the inlet boundary condition. Static pressure outlet as the outlet boundary condition. Air was used as the fluid in the domain. The side walls of the inlet and outlet domain were specified as outer wall and the standard wall boundary conditions were applied to blade pattern.

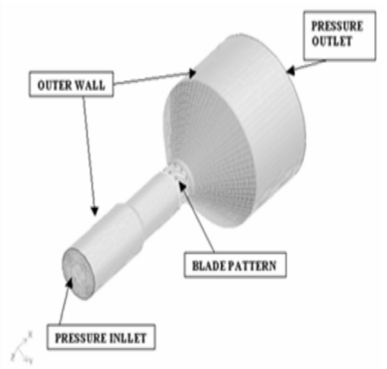

Fig 6: Computational domain with boundary conditions

Analysis Procedure:

Grid size plays an important role in both convergence and accuracy of solution. Finer grids, in general, yield more accurate solution but they are also sometimes susceptible to non-convergence and always require larger computational resources and time. Thus, an intelligent trade off between the grid size on one hand and convergence and accuracy on the other is required. In the present work grids of varying sizes were employed to ensure that the numerical solution is obtained.

The first step is to design swirler based on the drawing dimensions available at GTRE, generate a CAD model of the swirler and

experimental set-up using an appropriate CAD modeling software like CATIA V5R15. Thereafter the geometry has been converted into IGES format and exported into the meshing software HYPERMESH for discretisation. It was meshed using 2,82,042 hex8 elements. The boundary conditions were applied in GAMBIT, as shown in Fig 6.

The discretised model with relevant boundary conditions was exported to FLUENT for simulation. Total Guage pressure, initial Guage pressure and total temperature were specified as boundary conditions at the pressure inlet. Static pressure (atm) at the exit was applied as the pressure outlet boundary condition. The standard wall boundary conditions and Blade pattern were applied, which state that there is uniform wall temperature and no slip between the wall and the fluid. Here air was used as the fluid in the domain. The turbulent flow was modelled with the realizable k -ε model. The implicit, segregated solver was used for the flow calculations. The computational results were compared with the published experimental results.

Results and Discussions:

For the validation studies of the present numerical solutions, the performances of the CFD analysis were compared with the experimental data results and are shown in Fig 13.

The Fig 7 shows the pressure is high at the inlet of the domain and then reduced after the blade pattern. The Fig 8 shows the high temperature at the trailing edge then reduced towards the leading edge.

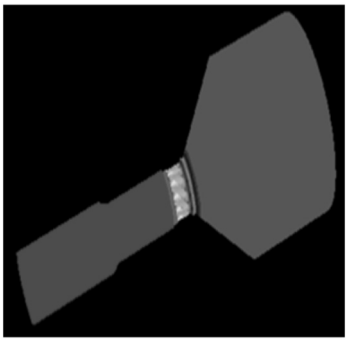

Fig 7: Pressure Contours

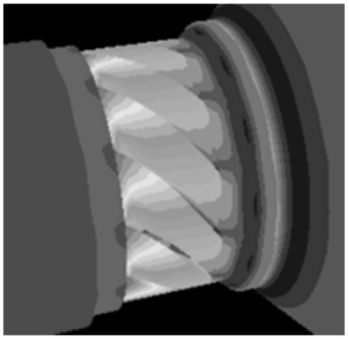

Fig 8: Pressure Contours on a Blade Pattern

The Fig 9, shows the Temperature contours of the domain, the temperature is very low at the inlet and when air is passing through the swirler vanes, the temperature starts increasing and at the outlet the temperature will be more.

The Fig 10, shows the velocity contours on the blade pattern.

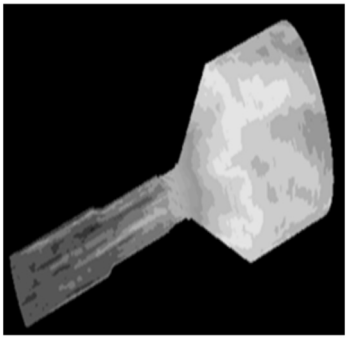

Fig 9: Temperature Contours

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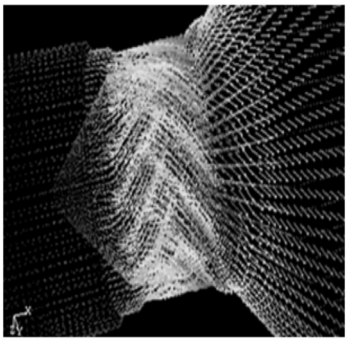

Fig 10: Velocity Contours on Blade Pattern

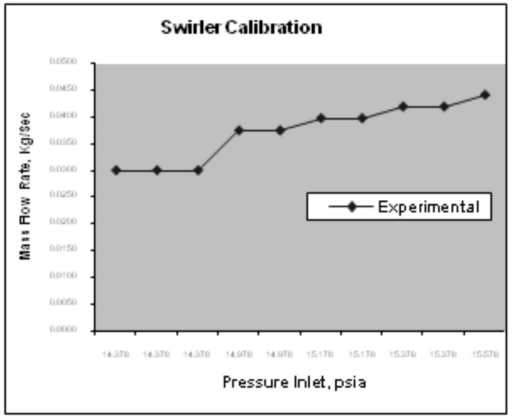

Fig 11: Performance map of experimental Data

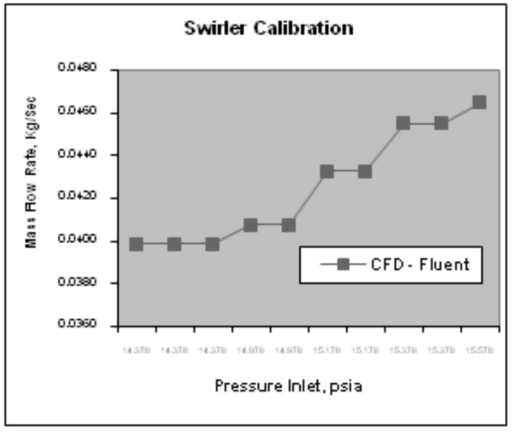

Fig 12: Performance map of CFD Analysis.

Fig 11 shows the actual Performance map of the Experimental Data for the swirler calibration at GTRE, Bangalore. Fig 12 shows the Performance map of the CFD Analysis Data for the swirler calibration.

A comparison of the present computations with the performance map of the CFD results (Fig 12) shows that they are in good agreement with the Experimental performance map (Fig 11). These results demonstrate that CFD tool (FLUENT 6.2) can be employed to study complex flows in swirler over a wide range of operating conditions.

The Results shown in Fig 13 are the validations done by Fluent Inc. The purpose of this validation step was to ensure the stability of the flow solver, the accuracy of the computational grids, and the wellposedness of the boundary conditions and input data.

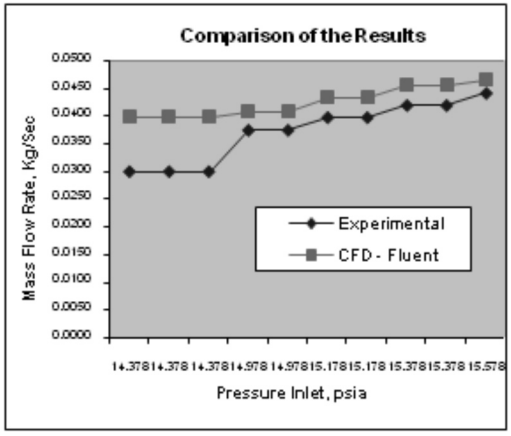

Fig 13: Performance map showing comparison between experimental data and current Fluent predictions

Conclusions:

- Modelling of Swirler calibration experimental set-up have been carried out using 3D CAD software CATIA V5R. From these 3D CAD models 2D Auto CAD working drawings in any desired cross section were obtained. This helps in reducing the human error in obtaining the drawing dimensions.
- These CAD models are converted to iges format to export to HYPERMESH for fine meshing and exported as .hmascii to CFD with high resolution to analysis.
- The predicted performance of the swirler calibration is found to be almost close to the design intent.
- Comparisons of mass flow rates and pressure drops with proven experimental results show fairly good accuracy of the CFD solver.
- Swirler Flow analysis by CFD will be apt, as experimental measurements of three dimensional complex flow is very difficult. Hence the CFD analysis can be utilized for parametric and optimization studies.

Nomenclature:

Symbol	Description
N	No of vanes
mo	Mass flow rate (Kg/sec)
P	Pressure (bar)
T	Temperature (oK)
D	Diameter (mm)
□	Blade angle (degree)

Abbreviations

CFD	Computational Fluid Dynamics
CAD	Computer Aided Design.
CATIA	Computer-Aided Three -Dimensional Interactive Application
GTRE	Gas Turbine Research Establishment
3-D	Three Dimensional
BC	Boundary Conditions

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CFD Analysis of Heat Sink for High Power Electronic Equipments

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Abstract:

The forced-air cooling technique, one of the effective methods for thermal management of electronic equipment cooling, is commonly used in a conventional-size heat sink. Conventional or mini sized heat sinks are commonly used in many industrial applications as cooling devices, because of their easy serviceability, high reliability, simplicity in the mechanism of heat transfer and ease of testing. In this paper heat sink is designed and analyzed for different velocity variation at the inlet to select appropriate fan to cool the heat sink and also effect of ambient conditions on the heat sink are studied. Finally the results are compared with the Computational Fluid Dynamics software FLUENT.

Key Words: *Heat sink, fins, forced air cooling, CFD analysis.*

Introduction:

Generally heat sink essentially consists of a flat base and an array of fins to increase the surface area so that that the heat dissipation rate is also increased. These are devices that enhance heat dissipation from a hot surface, usually the case of a heat generating component, to a cooler ambient, usually air which is assumed to be the cooling fluid. In most situations, heat transfer across the interface between the solid surface and the coolant air is the least efficient within the system, and the solid-air interface represents the greatest barrier for heat dissipation. A heat sink lowers this barrier mainly by increasing the surface area that is in direct contact with the coolant. This allows more heat to be dissipated and/or lowers the device operating temperature. The primary purpose of a heat sink is to maintain the device temperature below the maximum allowable temperature specified by the device manufacturers.

IBM built the milestone computer in 1944 which used air-conditioned hallways to cool its 18000 vacuum tubes, 500000 soldered joints. When BELL labs developed transistor in 1947, most scientist thought that the burden of cooling electronics would be eliminated. The theoretical basis of the methods currently used to design heat sinks were initially described by Kays and London [1964] and by Kern and Kraus [1972]. Poulikakos and Bejan [1982] have published extensively in the area of optimization of a heat sink using an entropy minimization approach. Amongst the recent literature, the work of Culham and Muzychka [2000] extended Bejan's work to include the optimization of a plate fin heat sink together with the pressure drop effects associated

 ISBN: 978-81-910118-7-6

with viscous dissipation. Bar-Cohen and Jelinek [1985] and Yeh and Chang [1995] studied the cooling effect with the least material optimization for the fin array heat sink by using mathematical formulation.

Leung and Probert [1989] used experimental measurements to find the optimum separation for vertical rectangular fins protruding from a vertical rectangular base. Sparrow and Larson [1982] experimentally measured heat transfer coefficients for pin-fin arrays when the airflow initially enters the array perpendicular to the fin base. Recently, Lee [1995] presented a simple method to determine the flow velocity between fins. Minakami et al. [1996] carried out experiments and numerical studies to evaluate the effect of flow guide vanes on an air-cooling pin-fin array heat sink. The pin-fin array used in the experiments was made of thin square copper pins. Kobus and Oshio [2005] developed a theoretical model as well as experimental study for predicting the thermal performance of pin-fin array heat sinks under conditions of mixed convection for the case of impinging flow on vertical arrays and later included radiation in their analysis [2006]. Charnwit Udomsakdigool et al. [2007] experimentally investigated the heat sink performance of a new rectangular fins array for Thermoelectric Dehumidifier varying the operating conditions like the distance between the fan and the fins, heat flux applied to the sink, and fan voltage. Bhramara et al.[2008]had studied, the performance of a desktop heat sink under forced convective conditions of air cooling using ANSYS-FLOTRAN. The results were compared with experimental data obtained using the aluminum desk top computer. While there have been continued advances in high heat-flux technologies, commercial and consumer oriented systems continue to focus on air cooling for reasons of reliability, cost, and portability.

In this regard a heat sink is designed and analyzed for different velocity variation at the inlet to select appropriate fan to cool the heat sink and also effect of ambient conditions on the heat sink are studied. Finally the results are compared with the Computational Fluid Dynamics software FLUENT.

Determination of Volume of Heat Sink:

Table1 shows approximate ranges of volumetric thermal resistance of a typical heat sink under different flow conditions.

Table 1: Range of volumetric thermal resistance

Flow condition m/s	Volumetric Resistance cm3 °C/W (in3 °C/W)	
Natural convection	500-800	(30-50)
1.0 (200)	150-250	(10-15)
2.5 (500)	80-150	(5-10)
5.0 (1000)	50-80	(3-5)

The smaller values shown above correspond to a heat sink volume of approximately 100 to 200 cm^3 (5 to 10 in^3) and the larger ones to roughly 1000 cm^3 (60in^3).

Design and Analysis of A Heat SINK:

The aluminum heat sink is considered for the analysis. It has a thermal conductivity

of 205W/m K. Its ease of fabrication and light weight make it excellent material for forming long individual fins.

Building The Model:

Depending on the dimensions of the base plate, 3-D Cartesian co-ordinates of brick is created. With given dimensions one fin is created and it is positioned at the appropriate location using the option move and translates. 9 more fins are created using the option copy and then fluid zones are created in between the fins and base plate. Finally, twenty volumes, one comprising base plate, ten volumes being fins and reaming nine being fluid volumes, the volumes between the fins and the base plate are formed.

Grid Generation:

First, the fin volumes are discretised, using volume mesh technique. A HEX uniform type of mesh elements used in the grid. A similar approach is used in the meshing of the volume between the fins but with non uniform size elements are used. Near the walls of the fin fine size of elements are used and at the middle courser size elements are used. Finally base plate is meshed with HEX. The overall mesh of the geometry consists of 4, 17,560 elements of which the equi-skew ness of the worst element is 0.0471605.

Defining Material Properties:

The properties of air at 57.5^{o}C and those of Aluminum at room temperature are given as inputs in the material properties window under fluid and solid categories

Boundary Conditions:

Boundary conditions are entered as follows:

a. Base plate, Fins (solid): - Aluminum properties are assigned.

b. Base top(wall): Base top is receiving heat from the chip, so heat flux is applied on the base top

c. Fin bottom, Front face, Left, Right, Rear face (Walls): Heat transfer to surrounding atmosphere by convection

d. Inlet (velocity inlet): Air enters into the Heat sink with 12m/s in the negative z-direction according to the geometry.

e. Outlet (Pressure Outlet): After passing through the heat sink air enters into atmosphere, so at outlet atmospheric pressure is assumed

After applying the above boundary conditions. Simulation is performed under steady state conditions till the convergence is reached.

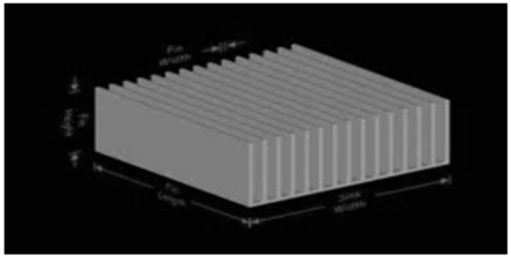

Fig1: Designed heat sink after applying the boundary conditions

Theoretical Solution Procedure:

Assumptions:

Ambient temperature of air (t_a) = 45^{o}C

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Velocity of air (v) = 12m/sec

Thickness of the fin (t) = 1.5mm

Length of the fin = 0.146m

Average temperature (t_f) = $\left(\frac{ts+ta}{2}\right)$

= (70+45)/2

=57.5°C

The properties of dry air at 57.5°C

Determining the Heat Transfer Coefficient (Natural Convection):

Using the following equations

Ra = [Pr*g*β*(Ts-Ta)*L3]/ v²

$S_{opt} = \frac{2.174 * L}{Ra^{0.25}}$

$Nu = \frac{h*s}{k} = \left[\frac{576*L}{Ra*s} + \frac{0.1693*L}{s}\right]^{0.5}$

Determination of area required:

Q = h A (Ts-Ta)

Design of Forced Convection Cooling System For Cooling High Power Electronics Systems

Determining the type of flow:

Reynolds's number (ReL) = (ρ v L)/μ

Determining the heat transfer co-efficient (h):

To find the NUSSELT number we use the formula given below for forced convection.

$$Nu = \frac{7.54 + (.03 * ((D_h)/L) * Re_{Dh} * Pr)}{(1 + 0.016 * \{((D_h)/L) * Re_{Dh} * Pr\}^{2/3})}$$

m = ρ*Sopt*H*(n-1)*V

Q = m *Cp* (tmax-tamb)

Theoretical Results

Table 2 shows different values keeping inlet velocity at 12m/s

Ambient Temperature (ta) °C	Area of Sink (A) (m^2)	Height of fins (H) (m)	Coefficient of convective heat transfer Watt/m^2 °C(h)	Final temperature (Δt) °C
30	0.084	.010	62.51	47.86
35	0.09	.010	61.98	51.6
40	0.105	.013	61.07	53.6
45	0.105	.017	60.68	55.25
50	.0126	.021	60.12	58.61

Table 3 shows different values keeping ambient temperature at 45°C

Velocity of air (v) (m/sec)	Area of sink (A) (m2)	Height of fins (H) (m)	Coefficient of convective heat transfer Watt/m^2 °C(h)
4	0.105	0.029	44.44
6	0.105	0.024	49.94
8	0.105	0.0209	54.56
10	0.105	0.018	58.64
12	0.105	0.017	60.68
14	0.105	0.016	63.54

Results and Discussions

Results obtained using FLUENT software and theoretical calculations of the heat sink are compared.

Variations of the Temperature along the Sink

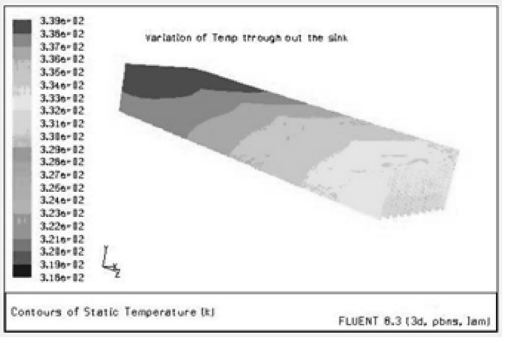


Fig2: Variations of the Temperature along the Sink

The figure2 represents the temperature variation along the sink using FLUENT CFD solver. Here the sink receives heat from the chip which is placed at the top so more temperature is observed at the top of the sink i.e at the base plate. At the inlet of the sink the temperature is less compare to the rear end of the sink because the front end of the sink is exposed to the cold inlet air. At the bottom of the sink temperature is less compared to the top of the fin because due to conduction heat is transferred from base to fins and from fins heat is transferred to air by convection.

Variation of the temperature at the inlet, middle and outlet of the sink:

The figure3 represents the temperature of the sink and air at inlet, middle and outlet sections. It is observed that minimum temperature of the sink and air is at inlet section and maximum at the outlet section due conduction and convection.

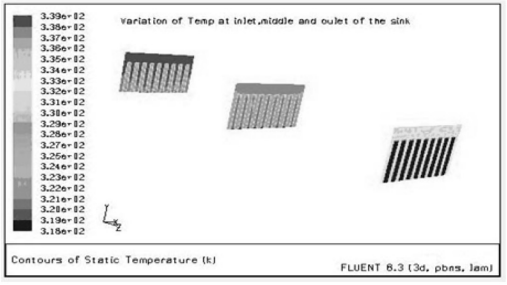


Fig3: Variation of the Temperature at the Inlet, Middle and Outlet of the Sink

Variation of temperature on top of the base plate:

The below figure4 represents the variation temperature on the top of the base plate along the depth of the plate. The temperature is minimum at the right and left side of the top of base plate and it is maximum at the mid of the base plate due to more heat transfer at the sides of base plate due convection

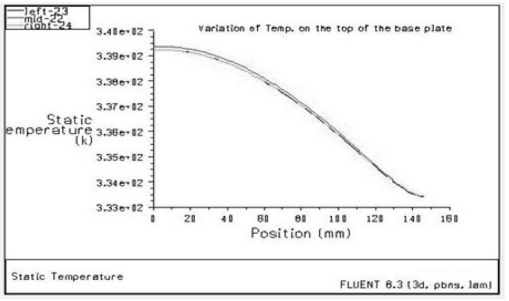
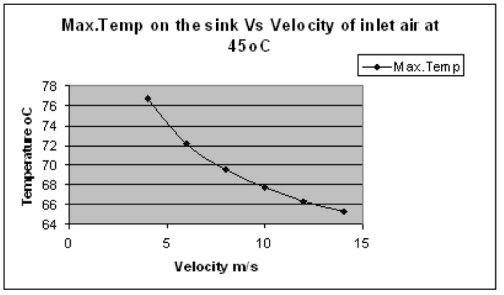


Fig4: Variation of Temperature on Top Of the Base Plate

Variation of max temp on the sink with Velocity of inlet air at 45°C:



Graph1: Variation of Max temp on the sink with Velocity of inlet air at 45°C

The above graph1 represents the Maximum temperature on the sink for different inlet velocities if inlet air. As the inlet velocity increases the maximum temperature on the sink decreases because more heat is transferred to the air. At 4 and 6 m/s the maximum temperature on the sink is exceeding the maximum design temperature 70oc. The sink should be operated above 6m/s inlet temperature if

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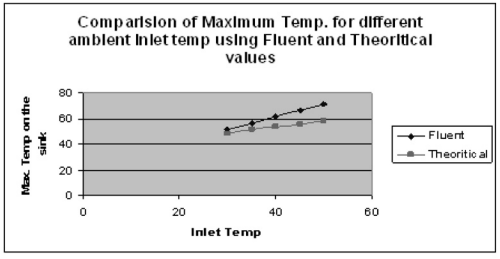
the ambient temperature is 45oc.

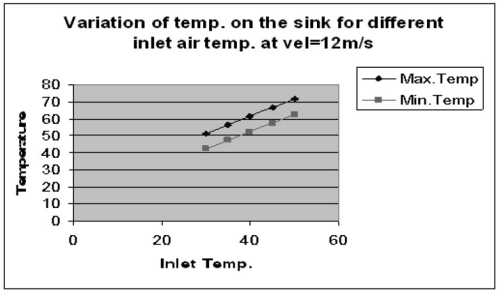
Comparison of maximum Temperature for different ambient inlet temp using Fluent and Theoretical values:

The following graph2 shows the variation of maximum sink temperature for various inlet temperatures .The maximum temperature obtained using theoretical calculations are less compared to Fluent calculations because assumptions are made for theoretical calculations.


Comparision of Maximum Temp. for different ambient inlet temp using Fluent and Theoritical values
Max. Temp on the sink
Inlet Temp
Fluent
Theoritical

Graph2: Comparison of maximum Temp. For different ambient inlet temp

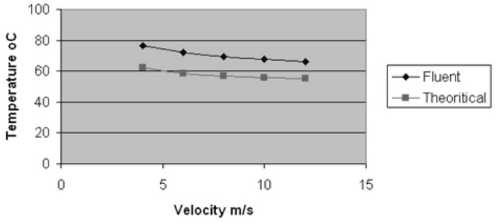
Variations of temperature on the sink for different inlet air temperature at a velocity =12m/s:



Graph3: Variations of temperature on the sink for different inlet air temperature at a velocity =12m/s

The above graph3 shows the variation of the maximum and minimum temperatures of the sink at constant air velocity of 12m/s and varying inlet temperature. As the inlet temperature of the ambient air increases the maximum and minimum temperatures on the sink also increases. All the theoretical values are below 70°C but at 50°C inlet temperature, the maximum sink temperature just exceeds above 70°C in Fluent.

Comparison of temperature on the surface of heat sink using theoretical and fluent software:



Graph4: Comparison of temperature on the surface of heat sink

The above graph4 shows the comparison of theoretical and Fluent calculations for maximum temperature on the sink. All the values obtained theoretically are below 70°C but at 4m/s and 6m/s the maximum surface temperature exceeds 70°C using Fluent.

Conclusion:

Comparative studies of the design parameters of the heat sink are carried using Theoretical and CFD analysis and the following conclusions were made.

- The selected material for heat sink is aluminum because of its high thermal conductivity and it's lightweight.

- In order to optimize the chip usage parametric study is carried out by varying the ambient temperature, keeping the inlet velocity constant. It is found that at 12 m/s inlet velocity, the maximum ambient temperature allowed to operate the chip is 45oC.
- In order to optimize the chip usage, parametric study is carried out by varying the inlet velocity, keeping the ambient temperature as constant at 45oC. It is found that at 45oC ambient temperature, the minimum velocity of air allowed to operate the chip is 4m/s.
- Theoretical values and the values obtained from fluent are compared. It is found that maximum temperature values using Fluent are slightly more than the theoretical values because while calculating the theoretical values assumptions are made.
- This method took less time as compared to the theoretical procedure.
- The CFD results are close to theoretical values.

Data for reference

AMD Athlon, Athlon 64, Opteron, Duron and Sempron

All Slot A CPUs (Athlon classic, Athlon Thunderbird)	70°C
Athlon Socket A up to 1 GHz, Duron up to 1.3GHz	90°C
Athlon "Thunderbird" Socket A 1.1GHz or more	95°C
Athlon MP 1.33GHz or more	95°C
Athlon XP up to 2100+	90°C
Athlon XP 2200+ and faster	85°C
Duron "Applebred" 1.4G and faster	85°C
AMD Opteron	69 or 70°C depending on model
Athlon 64, 64FX, Sempron	
Most models	
Athlon 64 models	70°C; 65°C for some Socket 939
Athlon 64 X2 (dual core)	65°C
Intel Pentium Pro	
Pentium Pro, 256 or 512K L2 cache	85°C
Pentium Pro, 1MB L2 cache	80°C

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